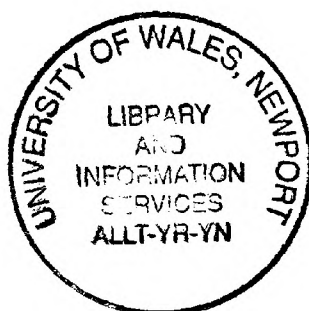


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**An Empirical Study of Quality Management in the Libyan
Higher Education Context: Al-Fateh University as a Case
Study**

By

Mokhtar Abdenour Elhees

**Business School
University of Wales-Newport**

**Thesis Submitted in Fulfilment for the Degree of
Doctor of Philosophy**

August 2008



Declarations

DECLARATION

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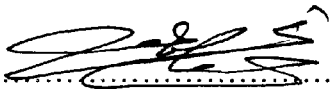
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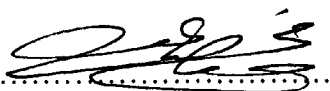
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Glossary and Terms of Abbreviations

AFU	Al-Fateh University
AFW	Analytical Framework
CMISQM	Continuous Measurement and Improvement of Service Quality Model
CQI	Continuous Quality Improvement
CSC	Career Services Centre
CSOM	Carlson School of Management
EED	Electric and Electronic Department
CEQ	Course Experience Questionnaire
EF	Engineering Faculty
EFQM	European Foundation for Quality Management
ERCO	Engineering Research and Consultancy Office
GDP	Gross Domestic Product
GEC	General Electrical Company
GPC	General Public Committee
GSUSM	General Syndication of University Staff Members
GTC	General Telecommunication Company
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HEIs	Higher Education Institutions
HERO	Higher Education & Research Opportunities
HESDA	Higher Education Staff Development Agency
HEA	Higher Education Academy
ICT	Information Communication Technology
JA	Jails Administration
LD	Libyan Dinar
LF	Literature Faculty
LHE	Libyan Higher Education
LTN	London Technology Network
LTSN	Learning and Teaching Support Network
MBQNA	Malcolm Baldrige Quality National Award
NAID	National Authority for Information & Documentation
NQAs	National Quality Awards
NSS	National Student Survey
OS	Oil Sector
OSU	Oregon State University
PCoHE	Public Committee of Higher Education
PDCA	Plan-Do-Check-Act
PGD	Post Graduate Diploma
QA	Quality Assurance

QAA	Quality Assurance Agency
QC	Quality Control
QE	Quality Enhancement
QLC	Quality Leadership Centre
RAE	Research Assessment Exercise
R&D	Research and Technological Development
SL1	Senior Leader (faculty heads)
SL2	Senior Leader (department heads)
SPC	Statistical Process Control
SSD	Social Service Department
T&L	Teaching and Learning
TLTP	Teaching and Learning Technology Programme
TQC	Total Quality Control
TQEC	Teaching Quality Enhancement Committee
TQEF	Teaching Quality Enhancement Fund
TQM	Total Quality Management
UNDP	United Nation Development Program

Abstract

Higher education institutions (HEIs) around the world and in the developing countries in particular e.g. Libyan HEIs are facing challenges that increase the pressure on them. Some of these challenges are related to the remarkable changes in population growth and fast changes in the development of knowledge and technology. Also, providing adequate resources, maintaining quality, raising funding and strengthening the curriculum are other challenges that need to be faced by those institutions. This research is aimed to investigate issues enabling and affecting the quality of services provided by Libyan public universities using principles of Total Quality Management (TQM) philosophy as a framework: Al-Fateh University (AFU) as a case study.

The research is qualitative in nature, employing a case study approach and using in-depth semi-structured interviews (from different levels including senior leaders, faculty members, support staff, students, and main employers) as the main data collection tool within the two selected embedded case studies. Those embedded cases are Electric and Electronic Department (EED)-Faculty of Engineering-AFU and Social Service Department (SSD)-Literature Faculty-AFU. Documents are used in addition to interviews in order to fully understand issues enabling and affecting the quality of services provided by the two embedded case studies.

Contribution to knowledge is evident by the study, which represents the first attempt to empirically investigate issues enabling and affecting the quality of services provided by Libyan public universities: AFU as a case study through two selected embedded cases EED and SSD. This research provides specific original findings which include the use of Arabic and English language in the same lecture, the concept of students' administration and its consequences, the speciality of leaders biases the understanding of the needs of subordinate staff, suspension of the students' performance regulations affected the quality of education programmes, and a unique situation was found to be the senior and junior staff programme that attempted to improve teaching through knowledge transfer. This research has reduced the gap in knowledge in Libyan HE context in specific and in Arabic HE context in general. Other implications for HEIs are also provided by this research.

CHAPTER 1

Introduction to the Research

1.1 Overview of the Quality Issues in Higher Education with Special Focus on Libya

Different institutions, organisations and companies around the world are facing a high degree of pressure from global economic competition where certain characteristics are demanded in products and services such as high quality, low cost, delivery time and shorter development time (Vernadat, 1996). These demands lead those organisations to focus on new product design, manufacturing and management strategies. Moreover, for competitive success in such environments either for production or service organisations, it is necessary to take into consideration intangible and intellectual resources (Kaplan and Norton, 1996). These resources include, high product quality and services, leadership style, culture, communication, encourage and training the employees, responsive and predictable internal processes, and, fulfilled and loyal customers. These complex sets of interacting issues need to be managed efficiently and effectively in an organisation. Total quality management (TQM) as a strategic management approach is able to deal with such complex sets, while it emphasises on totality, quality, and management (Besterfield *et al*, 2003). In addition, Besterfield *et al* states the concept of the three words of total quality management as:

- *Total – Made up of the whole.*
- *Quality- Degree of excellence a product or service provides.*
- *Management – Act, art, or manner of handling, controlling, directing, etc.*

Therefore, TQM is a way of managing an organisation to improve its overall effectiveness.

However, higher education institutions (HEIs) are facing challenges that increase the pressure on them, e.g. maintaining enrolment, providing adequate resources, maintaining quality, raising funding, and strengthening the curriculum (Sims and Sims, 1995). Additionally, most HEIs are challenged to seek new students aggressively, while these same students have a greater selection of universities and colleges to choose from than ever before in history (Bonvillian and Dennis, 1995; Hitt, 1998; Mergen *et al*, 2000; Sims and Sims, 1995). This indicates the availability and diversity of higher education institutions' services; however, this leads to creating a highly competitive environment in the marketplace of higher education institutions. In response to the above threats, many colleges and universities attempted the adoption of new

management programs such as TQM (Kanji and Tambi, 1999; Mergen *et al*, 2000; Lewis and Smith, 1994; Srikanthan and Dalrymple, 2007; Venkatraman, 2007). Also, Davies (2004) researched UK HEIs implementing aspects of business excellence using the European Foundation for Quality Management (EFQM) model. This model is based on TQM principles (Davies *et al*, 2007). Challenges facing higher education will be discussed in more detail in chapter 2, section 2.2.3.

The core mission of a HEI is to create, maintain and communicate knowledge and contribute to cultural, social and economic well being of society through education, research and scholarship (Bonvillian and Dennis, 1995). This could be realised throughout the main HEIs' activities that includes; teaching and learning, research, and interaction with business sector and establish partnerships with industry (Lambert (2003). In addition, developed countries have reached a considerable level, for example UK, in improving such activities towards better quality and more consistency with the needs of society. There is awareness that the teaching and learning process is an interaction process between teacher and educators (Sarayrah, 2003). In this case teacher plays a supervisor's role and guides the process. Also, learners can mutually interact and contribute effectively, discussing the subject in the class. However, Alfnish *et al* (1998) point out, that in the Libyan HEIs, teaching and learning processes still rely on traditional methods, where only the teacher is considered as a core of such processes. Also, Alfnish *et al* mentioned that there are several reasons behind using such traditional methods, these reasons include:

- *Increases in the number of students:* Libyan HEIs has witnessed an increase in the number of students, this leads to the increase of students per lecture hall (e.g. more than a hundred students in one hall in some HEIs), which negatively impacts students' learning and minimise their opportunity to get maximum benefit from teacher's skills in using new teaching methods. In addition, there is a lack of direct contact between the teacher and his students, which is important in the teaching and learning process.
- *Financial resources and staff training:* There is a shortage in many important facilities which includes; educational equipment, laboratories, libraries, books and journals in the Libyan HEIs. This shortage leads many teachers to use traditional lectures particularly in arts and humanities studies. In addition, students find difficulties to apply practical work, field studies and many other activities that could realise the required compatibility between theory and

practice in the absence of appropriate financial support. Furthermore, most of the academic staff in the Libyan HEIs do not receive adequate and effective training programmes in teaching and learning methods, despite their highly qualified specialised scientific skills.

- *Administrational system:* Due to the centralisation and bureaucracy of administrative system in Libyan HEIs it is difficult for teachers to get sufficient support, to apply or suggest ideas that could contribute effectively in improving their ways of teaching. Thus, teachers have to rely heavily on theoretical lectures rather than balancing between theory and practice.

Moreover, UNDP (2002), points out that Arab countries' progress includes Libya in the areas of scientific research and technological development (R&D) and information communication technology (ICT) are relatively weak. Also, Arab countries have some of the lowest levels of research funding in the world, since R&D expenditure as a percentage of Gross Domestic Product (GDP) was only 0.4 in 1996, compared to 1.29 in 1995 for Cuba, 2.35 in 1994 for Israel and 2.9 for Japan. However, UNDP (2002) further adds that Arab countries can build effective national R&D systems. UNDP (2002) adds this requires "*broad-based attitudinal change, involving a clear policy commitment from national authorities, wide public respect for science and knowledge and a keen desire on the part of society to keep up with scientific progress*". In addition, organisationally, the development of successful long-term R&D policies requires effective co-operation between R&D institutions, universities, and industry. Furthermore, UNESCO (2003a) states that Arab universities are encountered with the "*failure of higher educational curriculum in general to meet the demands of rapid transformation in the world of today, whether in terms of the needs of the labour market or the needs of the societies in which these universities operate*". This indicates that the curriculum provided by Arab universities does not match or consider the needs of their stakeholders e.g. employers, government bodies, and society as a whole. However, stakeholders should be involved in educational programmes offered by such universities in order to integrate universities with business, industry, and society Salama (2001).

Salama adds that according to the different issues mentioned above, employers emphasised that graduates (as a university's outcomes) must be adaptable, self-motivated, flexible and able to interact effectively and efficiently in teams. Also graduates should have good interpersonal skills such as teamwork and communication skills, problem solving skills, and able to synthesise and integrate information and

construct meaning from the data available. Additionally, graduates like to be acceptable, encouraged, empowered and involved, and provided with necessary skills required by the labour market. Accordingly, graduates need to be employed by other sectors such as business and industry; they should possess certain skills required by these sectors. Though, HEIs should understand the needs and desires of their stakeholders including students and employers. They should also work towards embed and adopt new strategies that could realise those needs and desires effectively.

1.2 Contextualising the Problem of Quality Issues in the Libyan Higher Education

Despite the privacy and confidentiality of the Arab states, each has its own political regime, borders, army, and currency, but there are important issues where the similarity takes place and cannot discuss one of these issues within one state without mentioning the others. Such issues include history, culture, social structure, language and religion. On the other hand, UNDP (2002) highlights deficits in the Arab countries not only in education, knowledge, technological know-how, creativity, and research and development initiatives, but also lists the deficits in freedom, participation, democracy, and justice. All of which are as important to human dignity as access to health care, quality education, clean water, food and security.

Accordingly, the LIBYAN DELEGATION REPORT (1998) highlighted the following points concerning quality in HE:

- The concept of quality should comprise all functions and activities of HE.
- HE should be distinct in its international dimension.
- The skills of academic employees should be developed.
- It is necessary to co-operate with regional and international expertise.
- Quality standards should be developed related to the labour market and get maximum benefits from new technology.

Also, the Libyan delegation report mentions that due to the increases in the number of students applying to the universities, funding becomes a concern for the government and higher education institutions (HEIs) in Libya. It is important that the government should carry its responsibilities and commitment towards this problem. In addition, HEIs in Libya are required to manage their resources in more efficient and effective ways, and to find other alternative financial resources. Hence, assuring quality initiatives at all levels in the Libyan HEIs, either organisational or/and academic is a critical factor that could help overcome many challenges facing HE today in Libya.

Billeh (2002) points out that the most significant reasons behind the weaknesses encountered in educational systems, at all levels in the Arab countries, including HE systems is the lack of information and education management information systems. The Libyan educational system is one of the Arab countries' educational systems in which information and educational management information system are required. Billeh adds despite the expansion based on increase in the number of higher institutions in the Arab countries, efficiency, diversity and relevance of HE are still low. Also, according to Billeh accreditation remains a problem in the absence of convincing accreditation agencies. UNDP (2003) suggested that the model for managing efficient and effective HEIs in the Arab countries should be under supervision of four independent management boards represented by government, business sector, civil society, and academics. Moreover, establishing independent institutions for assessing HEIs programmes to assure their quality services will integrate the efforts of independent management boards.

The number of students' enrolment in the Arab HEIs is beyond the resources and facilities available in such HEIs (Salama, 2001). These resources and facilities encompass funds, buildings, staff, libraries, laboratories, and other different services. This impacted negatively on the role of these HEIs from different aspects including their educational processes, quality level of services, responses to the labour market needs and quick response to the changes and development of the world economics. Salama asked how Arabic HEIs could apply an effective strategy e.g. TQM to tackle such issues, where he suggests the following:

- Rebuild the organisational structures of HEIs, in order to support TQM initiatives and the existence of quality boards and committees to improve quality and measurements.
- Support the academic, administration, and financial independency in HEIs in order to provide more innovative opportunities, more empowerment to the lower management levels and satisfying internal and external customers.
- HEIs stakeholders should be involved in a more effective way, such that different labour sectors could play an efficient role in institutional educational programmes. This will lead to enabling HEIs to respond quicker to the labour market needs and facing technological changes effectively.

Salama mentions that TQM implementation in the Arab HEIs could face some difficulties due to two general issues: (i) lack of adequate qualified people in the field of

TQM, this lead to his recommendation that there should be a training programmes regarding preparing such qualified people. And (ii) lack of data and contemporary information systems; however there should be appropriate efforts to develop modern and efficient information systems. Also, there is less co-ordination and integrity between higher education administrations and society in general.

In the light of the above discussion, quality initiatives in the Arab HE systems in general, and in the Libyan HE system in particular, are strongly recommended and required in order to improve and strengthen the quality services provided by such systems. Moreover, UNESCO, (2003b) points out that quality assurance and accreditation of HEIs and programs are quite new in most of the Arab states, and still absent in many of them. Furthermore, UNESCO, (2003b) Article 6 of the Beirut Declaration which states,

“All HE systems and institutions should give a high priority to ensuring the quality of programmes, teaching, and outcomes. Structures, procedures, and standards for quality assurance should be developed at the regional and national levels commensurate with international guidelines while providing for variety according to the specificities of each country, institution, or programme”.

Consequently, some of the Arab countries such as Egypt, Lebanon, Oman, Saudi Arabia, United Emirates, and Palestinian Authority have adopted, or are on the way to adopt, rules and procedures for quality assurance and accreditation among their educational systems. However, Libya in which this research is focused is not one of those countries. Hence, this gives the opportunity for this research to be a considerable useful body of knowledge towards supporting and helping HE decision-makers in Libya to understand different issues that could affect Libyan HEIs activities towards improving the quality of their provided programmes.

1.3 Research Aim and Objectives

The main reason for undertaking the research study is to acquire additional knowledge and understanding based on the findings, which will be added to the existing theories in the area of quality in higher education. The main aim of this research is to investigate issues enabling and affecting the quality of services provided by Libyan public universities using principles of Total Quality Management (TQM) philosophy as a framework: using Al-Fateh University (AFU) as a case study.

To guide the research to reach the aim of this study, several objectives have been developed as below. The fulfilment of all these objectives will ensure that the aim is met.

- To review the literature relevant to this research, both from TQM philosophy in general and from HE publications in particular.
- To develop an analytical framework based on TQM philosophy that enables the creation of a set of in-depth semi-structure interview themes and consequently questions.
- To investigate the historical and current background of the Libyan HE context, in order to understand the difficulties or/and issues facing Libyan HEIs that might affect the quality of their provided services.
- To identify and critique issues related to the investigated TQM themes within the Libyan HE context.

1.4 Research Motivations

The motivations of the current research grew from the following:

- The previous investigation in the context of HE revealed that there has been no previous efforts made towards investigating issue that enable and affect the quality of services provided by Libyan universities. Hence, it is the first contribution towards a useful conceptual understanding of such issues in Libyan universities.
- There is a general agreement among Libyan educators about the importance of quality improvement of the services provided by Libyan HEIs (Libyan delegation report, 1998; Garyounis University, 2008).
- The challenges facing HE around the world in general and in developing countries in particular includes Libya (e.g. remarkable changes in the population, funding of HE, and fast changes in the development of knowledge and technology)
- In the belief of the researcher as a staff member in one of Libyan HEIs for more than twenty years, Libyan universities would benefit greatly from identifying and understanding the issues enabling and affecting the quality of their provided service in order to improve the programmes offered and the activities.
- The use of key TQM principles as analytical framework to investigate issues enabling and affecting the quality of services provided by public Libyan

universities could be justified by TQM advantages in HE (e.g. Newby, 1999; Kanji and Tambi, 1999; Sallis, 2002; Cole, 1995).

1.5 Research Process

This section provides an overview of the research process to be adopted. More detail and critique of the research process is provided within this thesis in the research methodology chapter. The researcher will carry out this research in the following steps:

- **Literature Review:** It is well documented that researchers need to establish a clear understanding of the existing body of knowledge in their specialisation area, which should come through an extensive literature review (Saunders *et al*, 2003; Sekaran, 2003; Yin, 1994; Yin, 2003). Likewise, the literature review of this research is to be conducted to enable the researcher to know and understand the Total Quality Management (TQM) concepts, theory, models, knowledge and information provided in this field both in general and in Higher Education (HE).
- **Selecting the Research Philosophy:** Saunders *et al* (2003) stated that the research philosophy reflects the way we think about the development of knowledge, which in turn affects the way we go about doing research. Also, based on the aim and objectives of the research stated in section 1.3, phenomenology (interpretivism/constructionism) stance is adopted as a research philosophy.
- **Selecting the Research Approach:** There are two major categories of approaches to research. These two approaches are named qualitative and quantitative (Merriam, 1988; Hussey and Hussey, 1997). During qualitative research, the researcher is interested in meaning and understanding of a phenomenon (Merriam, 1988). Ghauri *et al*, (1995) stated that “*Qualitative methods are therefore more suitable when the objectives of the study demands in-depth insight into a phenomenon*”. Likewise this research, where the research aims to study and understand in-depth the phenomenon under investigation.
- **Selecting the Research Strategy-The Case Study:** The purpose of the research strategy is to satisfy the research aim and objectives given in sections 1.3. Robson (1993) defines case study as a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence (likewise this research). Within a case study adopted there will be two embedded cases, this

improving rigour in providing internal validity of research finding as suggested by Yin (2003).

- **Selecting the Data Collection Methods:** To conduct a case study, the researcher has to identify the sources of evidence as described by (Denzin and Lincoln, 2003). Yin (1994) mentioned that there are six such sources: documents, archival records, interviews, direct observation, participation-observation, and physical artefacts. In this research, the two main sources of evidence used are interviews (in-depth semi-structured interviews from two embedded cases) and the related documents. However, there is recognition that not all documents exist or are not available (see section 7.14).
- **Conducting a Pilot Case Study:** Many experts in research methodology agree that at some stage in the research design process, questions provided by researcher either through questionnaires or/and interviews should be subjected to preliminary test (Hussey and Hussey, 1997; Sekaran, 2003; Yin, 2003). This is known as piloting, where researchers can refine the questions and focus on particular areas that may have been unclear previously (Hoinville and Jowell, 1977; Denzin and Lincoln, 2000). Accordingly, the research conducted two pilot studies; the first was conducted with a number of Libyan research students (PhD students) in the UK, who were involved as staff members in the Libyan universities. The second pilot study was conducted within the real case study.
- **Analysis of Collected Data:** the collected data from the case study university is analysed according to suitable methods which discussed in methodology chapter in this thesis.

The above bullet points provide a brief overview of the main steps of the research process, more details of such steps are provided in methodology (chapter 5) in this thesis.

1.6 The Research Structure

Figure 1.1 shows the structure of the thesis in eight chapters. Chapter 1 provides an overview of the research and background for the later chapters. Chapter 2 is the literature review which is divided into two parts; part I gives review of TQM theory in general, part II provides review of TQM in higher education. Chapter 3 offers the analytical framework including those aspects of key principles (themes) of the TQM philosophy.

Chapter 4 provides the Libyan HE context, and chapter 5 explains the research design and methodology used to accomplish the study objectives. It also describes the justifications and interpretations for choosing the specified approaches. Chapter 6 presents and describes the key research findings of the study, and provides data collected by in-depth case study research from Al-Fateh University (AFU). Chapter 7 presents the discussion of the findings and results obtained from the case study research in the light of the literature in relation to the research aim and objectives. Finally, chapter 8 presents the overall conclusions drawn from the research in the light of the research aim and objectives. Chapter 8 also summarises the research contribution to the body of knowledge, the potential for future work in the area, and the suggested recommendations.

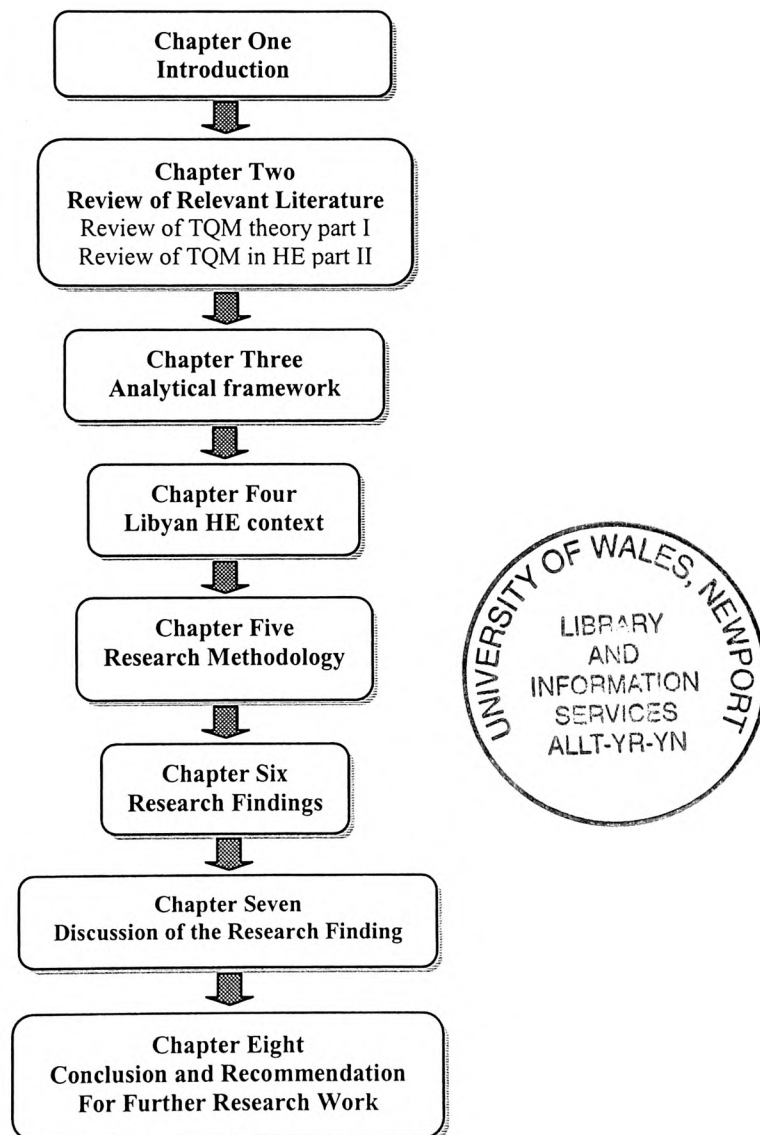


Figure 1.1 Thesis Structure

CHAPTER 2

Literature Review

This chapter is split into two parts 2.1.0 TQM theory (part I), and 2.2.0 TQM in HE (part II).

2.1.0 Total Quality Management (Literature Part I)

The quality movement can trace its roots back to the early stages of humankind's life. The history of humanity is illustrative of human striving to improve the quality of life including products and services. For example, in ancient Egypt, Pharaohs used advanced techniques to construct the pyramids and codifier of laws in ancient Babylonia compiled by Hammurabi. In addition, through different stages of humankind's life, the quality of hunting tools and communication ways are developed and improved. However, these efforts were not formalised until Taylor carried out studies in 1919 when he noticed the physical effort of work and the role of workers (Martin, 1993). Also, Taylor established inspection to measure the work of people in the construction of buildings. This is accordingly considered as an initial step toward recognising quality as a concept in industry. Martin, (1993) states "*scientific management, sometimes referred to as Taylorism sought ways to increase productivity by applying the scientific methods to the study of workers*". Though, the concern for quality advanced much since the early 1930s through the contributions of Deming, likewise, other contributors include Juran, Crosby, Feigenbaum and Ishikawa (see section 2.1.3).

This section 2.1.0 and its subsections discuss the definitions and concepts of quality, the development of quality, contributions from quality gurus, TQM tools and techniques, and reviews literature on TQM implementation success and failure. Also, this part reviews quality awards including the Deming award, MBQNA (Malcolm Baldrige Quality National Award) award, and EFQM (European Foundation for Quality Management) award, besides a review of other quality models. These issues are shown in this chapter to represent the background to understand the notion of TQM philosophy.

2.1.1 The Concepts of Quality

There are many views concerning the concept of quality. Martin (1993) for instance considers that there is no specific definition of the term 'quality', however, various definitions of quality have been considered. For example, Crosby (1979) considers quality as "*Conformance to requirements*", while Deming (2002) states, that "*Quality*

should be aimed at the needs of the customer present and future". Moreover, Feigenbaum (1991) states that quality is *"the total composite product or service characteristics of marketing, engineering, manufacture, and maintenance through which the product and service in use will meet the expectation of the customer"*. Aguayo (1990) states, *"Quality is anything that enhances the product from the point of view of the customer"*. BS EN ISO 9000 (2000) indicates that, *"quality is a degree to which a set of inherent characteristics fulfils requirements"*. In addition, there are various classes of the characteristics of quality such as:

- *Physical (e.g. mechanical, electrical, chemical or biological characteristics);*
- *Sensory (e.g. related to smell, touch, taste, sight, hearing);*
- *Behavioural (e.g. courtesy, honesty, veracity);*
- *Temporal (e.g. punctuating, reliability, availability);*
- *Ergonomic (e.g. physiological characteristic, or related to human safety);*
- *Functional (e.g. maximum speed of an aircraft);*

Quality characteristics might include appearance, trademark, cost, delivery, and immediate responses to customer complaints (Besterfield et al, 2003; Aguayo, 1990). Additionally, Middlehurst (1995) thinks *"the most commonly accepted definition of quality is the totality of features and characteristics of product or service that leads on its ability to satisfy stated or implied needs"*. On the other hand, Sallis (2002) suggests that, *"Quality has a variety of ambiguous and contradictory meanings. Much of confusion over the meaning of quality arises because it can be used both as an absolute and as a relative concept"*. However, Chatterjee and Yilmaz (1993) go even further, and argue that Crosby's definition, which stated that *"quality is conformance to requirement"*, is false, since there is much more to quality than conformance to design requirements. In this context, Garvin (1991) settles on eight dimensions of quality which include; performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. Garvin adds that conformance is just one dimension of many relevant dimensions of quality. Consequently, the concept of quality becomes vague, since it depends on the users of products or beneficiaries of services. Therefore, there is no commonly accepted definition of quality, however, there is general agreement concerning the concept of quality and its importance to the customer and organisation.

2.1.2 Quality Development

Many academics, researches, and educators in the discipline of quality management such as Dale and Bunney (1999) and Sallis (2002) show that quality development has passed through four main stages include; Inspection, Quality Control, Quality

Assurance and Total Quality Management . Accordingly, figure 2.1 shows the evolution of these four main stages of quality. As this research aims to investigate issues enabling and affecting the quality of services provided by public Libyan Universities (Al-Fateh University as a case study). The following sections 2.1.2.1 to 2.1.2.4 illustrate the development of quality from inspection to TQM.

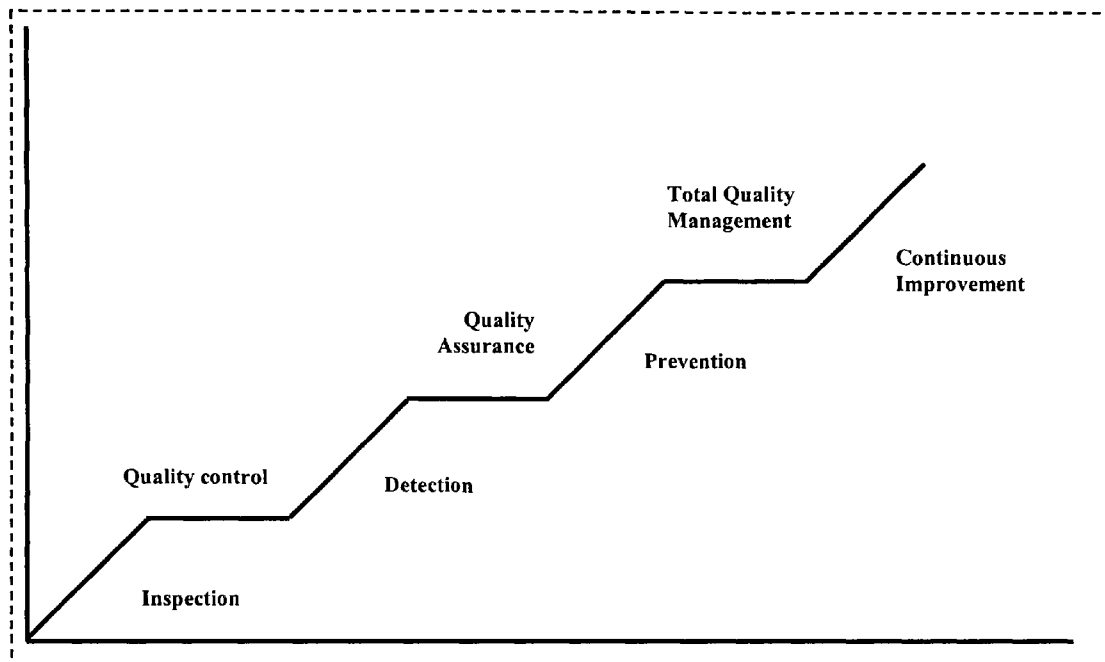


Figure 2.1 Development of Quality Stages; (source adopted from Sallis (2002:18))

2.1.2.1 Inspection

According to Dale and Bunney (1999), quality management started with a simple inspection-based system. They considered that the inspection takes a variety forms such as, measuring, examining, testing, or evaluating one or more characteristics of an entity and then comparing the results to realise the conformity under specific requirements. Moreover, BS EN ISO 9000 (2000) states the following concerning the term ‘inspection’ “*Inspection is a conformity evaluation by observation and judgement accompanied as appropriate by measurement, testing or gauging*”. Sallis (2002) points out that inspection has been applied in the industrial sector to examine and test the quality of products and services. Aguayo (1990) indicates that inspection is able to prevent defects from reaching the customer, but cannot improve the level of quality of the product. Though, products that do not conform to specification may be scrapped, reworked or sold as lower quality items; consequently such cases lead to more costs. While staff employed specifically for this purpose undertakes inspection, this helped to foster a widespread belief that achievement of quality was solely the responsibility of

the inspection staff (Zhang, 1997). In addition, this belief hampered efforts at eliminating the causes of defective products, hence the responsibilities were confused.

Consequently, incapable processes remained in force and continued to generate high costs of poor quality. Therefore, as Zhang (1997) suggests inspection becomes an unsuitable quality approach for managing complex processes.

2.1.2.2 Quality Control

Quality Control (QC) is the second stage of quality development. Zhang (1997) states that, *“under a system of quality control, product, testing and documentation control became the way to ensure greater process control and reduced non-conformance”*. Inspection and testing are the most common methods of QC for preventing products that are not up to standard (Sallis, 2002). According to Oakland and Morris (1997), QC is a series of activities and techniques used to accomplish and sustain the quality of a product, process, or service. Duncan and Warren International (1995) stated, *“Quality control is the operational methods and activities used to fulfil quality requirements, usually through and including the evaluation of data”*. Furthermore, James (1996) points out that the data used by QC is usually developed from the actual production process. Consequently, more efficient and effective control of manufacturing process will be achieved. Juran (1989) suggests that quality control is a managerial process during which we:

- *Evaluate actual performance.*
- *Compare actual performance to goals.*
- *Take actions on the differences.*

On the other hand, Feigenbaum (1991) defines total quality control as:

“An effective system for integrating the quality-development, quality-maintenance, and quality-improvement efforts of the various groups in an organisation so as to enable marketing, engineering, production, and service at the most economical levels which allow for full customer satisfaction”.

Therefore, quality control is an advanced activity compared with inspection, because it uses statistical tools and techniques to enhance quality products and services. However, statistical tools and techniques themselves cannot control and improve the quality, but they can help crucially in interpreting and analysing the data necessary for improving and controlling the quality of processes. In addition, such data usually developed from the actual processes; therefore the outcomes obtained from the analysis of this data would provide more robust and valuable information.

2.1.2.3 Quality Assurance

Quality Assurance (QA) is the third stage of quality management development. James (1996) states that, *“Quality assurance is any systematic process of checking to see whether a product or service being developed is meeting specified requirements”*. James adds that QA gives quality a wider perspective than previously through increasing the awareness of the notions of quality among workforce and management. Hence, the domain of a specialist no longer exists and quality becomes more than a professional concern. Furthermore, Sallis (2002) states, *“Quality assurance is the responsibility of the workforces, usually working in quality circles or teams, rather than the inspector”*. Sallis adds that inspection could have a role to play in QA. The international standard BS EN ISO 9000 (2000) defines QA as a *“part of quality management focused on providing confidence that quality requirements will be fulfilled”*. Seymour (1992) indicates that between the 1950s and 1980s, QA was applied to manufacturing sectors concentrated on the entire production chain, plus the contribution of all functional groups in order to prevent quality failure through the use of programmes and systems. Hence, QA is about constantly meeting product specification. Freeman (1993) suggests, *“Quality assurance is a systematic approach to identifying market needs and honing working methods to meet those needs”*.

Therefore, the quality assurances stage changed the way from product quality towards system quality in order to give stakeholders confidence about the management of quality and the outcomes achieved. Prevention of quality problems is the core of the quality assurance approach. QA uses planned and systematic activities to enhance prevention of quality problems. These activities include documentation, quality manuals, procedures, work instructions, etc.

2.1.2.4 Total Quality Management

The fourth stage of quality development is Total Quality Management (TQM). Kanji and Tambi (1999) indicated that TQM approach was applied effectively in industries in the US in the 1980s. In addition, firms who adopted the TQM approach were able to realise considerable achievements and cope efficiently with changes in the business environment. BS 7850 (1992) states that TQM is a *“management philosophy and company practices that aim to harness the human and material resources of an organisation in the most effective way to achieve the objectives of the organisation”*. Besterfield *et al* (2003) state,

“TQM is defined as both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organisation. It is the application of quantitative methods and human resources to improve all the processes within an organisation and exceed customer needs now and in the future”.

Additionally, Youssef (1994) defines TQM as

“a total philosophy whose objective is to meet or exceed the needs of internal and external customers by creating an organisational culture in which every one at every stage of creating the product and every level of management is committed to quality and clearly understands its strategic importance”.

Furthermore, TQM can be defined as a set of techniques and procedures used to reduce or eliminate variation from a production process or service-delivery system in order to improve efficiency, reliability, and quality (Steingard and Fitzgibbons, 1993). TQM is able to facilitate the organisation’s structure to create a quality culture, where every member of staff is able to work towards customer satisfaction (Sallis, 2002). James (1996) points out that TQM offers a means where fundamental management techniques, existing improvement efforts, and technical tools can be integrated under a well-organised approach focused on continuous improvement. Oakland (1993) states, *“TQM is an approach to improving the effectiveness and flexibility of a business as a whole”*. Hackman and Wageman (1995) reviewed the propositions of the three quality gurus (Deming, Juran, and Ishikawa, see section 2.1.3) regarding TQM, the review ends with five interventions which considered by those gurus as a core of TQM. Such interventions include; explicit identification and measurement of customer wants and needs, creation of supplier partnership, use of functional teams to identify and solve quality problems, use of scientific methods to monitor performance and identify points of high leverage for performance improvement, and use process management heuristics to enhance team effectiveness.

Writers of TQM have attempted to distinguish traditional management approaches and the TQM approach and have consequently shown that TQM introduces its management philosophy and principles in a different way from traditional management philosophy and principles (Martin, 1993). Table 2.1 shows a comparison between the two philosophies and principles. Bergman and Klefsjo (1994) stated five key elements of a TQM strategy in addition to top management commitment. These key elements are:

- *Focus on customer.*
- *Decisions should be built on facts.*

- *Focus on processes.*
- *Continuous improvement.*
- *Everybody should be committed to quality.*

Table 2.1 Comparisons between the Traditional management philosophy and principles, and TQM management philosophy and principles; (source: adopted from (Martin, 1993:25))

Traditional management philosophy and principles	TQM management philosophy and principles
The organisation has multiple competing goals.	Quality is the primary organisational goal.
Financial concerns drive the organisation.	Customer satisfaction drives the organisation.
Management and professionals determine what quality is.	Customers determine what quality is.
The focus is on the status quo.	The focus is on continuous improvement.
Change is sudden and is accomplished by champions battling the bureaucracy.	Change is continuous and is accomplished by teamwork.
Employees and departments compete with each other.	Employees and departments co-operate with each other.
Decisions are based on "gut feelings".	Decisions are based on data and analysis.
Employee training is considered a luxury and a cost.	Employee training is considered essential and an investment.
Organisational communication is primary top-down.	Organisational communication is top-down, down-up, and sideways.

However, Bergman and Klefsjo (1994) view TQM as a strategic management approach consisting of three components, values, techniques, and tools. Hellsten and Klefsjo further added that the core values need to be identified first, and then determination of suitable techniques will take place; as a result more appropriate tools can be recognised and used effectively to support such techniques. Freeman (1993) determined eight aims of TQM, which are:

- *A focus on the needs of the market;*
- *Achieve top quality performance in all areas, not just in the product or service;*
- *Establish simple procedures for quality performance;*
- *Continually review processes to eliminate waste;*
- *Develop measures of performance;*
- *Understand the competition and develop a competitive strategy;*
- *Ensure effective communication;*
- *Seek never- ending improvement.*

Moreover, Dale and Bunney (1999) mentioned eight key elements of TQM, which are:

- *Commitment and leadership of senior management;*
- *Planning and organisation;*
- *Using quality management tools and techniques;*
- *Education and training;*
- *Involvement;*

- *Teamwork;*
- *Measurement and feedback;*
- *Working together.*

In addition, Ho and Fung (1994) identified ten elements of TQM which are; leadership, commitment to quality, total customer satisfaction, continuous improvement, total involvement, training and education, ownership, reward and recognition, error prevention, and co-operation and teamwork. If organisation wants to realise the required success in a competitive environment, every one in the organisation must accept TQM philosophies, principles and practices (James, 1996).

Therefore, TQM introduces a philosophy that considers the integration of all vital organisation's entities in order to satisfy internal and external customers, exceeds their expectations and to achieve competitive advantage through a continuous improvement of its processes. It can be seen that different researchers and/or authors adopted different TQM definitions and frameworks based on their own findings and understanding of TQM and research objectives. Consequently, there is no accepted universal definition or elements of TQM, since researchers and/or authors have different ideas about TQM concepts, aspects and elements. Generally, there is agreement between such researchers and/or authors that TQM is a philosophy or approach to management focusing on customer focus, teamwork, continuous improvement, systematic process management, and supplier partnership. However, effective implementation of such philosophy or approach involves a set of practices. Many current authors of quality management have acknowledged the contribution of a few elite writers of quality, namely the quality gurus. The concept of TQM philosophy from quality gurus is reviewed in the next section.

2.1.3 The Concept of TQM Philosophy from Quality Gurus

There are many experts, consultants, writers, and educators who have written about the notion of TQM and its concepts. However, there are some particular writers who are well-known specialist in TQM field and their propositions are the foundation for understanding the concept of TQM. In particular, there are five gurus on quality include; W, Edward Deming, Joseph M. Juran, Philip B. Crosby, Armand V. Feigenbaum and K, Ishikawa. Such experts have had an enormous influence on the development of TQM. The following subsections present the main principles and practices of TQM philosophy proposed by these gurus, and hence helps inform the

themes and their aspects, and concepts provided by the analytical framework given in chapter 3.

2.1.3.1 Deming's Approach to TQM

Deming's philosophy is set out in his fourteen points, which are listed in Table A.1 (appendix 1). Walton (1985) points out that Deming's fourteen points are not a menu for managers to choose from. However, in order to implement the philosophy provided by such points, managers must follow each point. Anderson *et al* (1994) mentioned that Deming approach to TQM concerns of an organisational system that encourage co-operation and learning for facilitating the implementation of process management practices. Anderson *et al* added that this leads to continuous improvement of processes, products, and services as well as to employee fulfilment, both of which are important to customer satisfaction, and eventually, to organisation survival.

Deming stresses that the basic cause of industrial quality problems, was the lack of planning encountered senior management, while they controlled the resources available to the company and through their policies had the major impact on its culture (Sallis, 2002). Deming is mainly associated with quality management theories, particularly his fourteen points, Deming cycle, and deadly diseases. Also, in 1982, Deming published the first edition his book "*Out of Crisis*", which made him the father of the modern quality revolution.

2.1.3.2 Juran's Approach to TQM

Juran defines quality as "*fitness for purpose or use*" (Juran, 1989). The importance behind this concept is that the product or service can meet its requirement or specification and yet not fit for its purpose (Sallis, 2002). This indicates that meeting specification alone is not sufficient. Sallis adds, Juran believed, like Deming, if the quality problems to be traced back, the results will lead to management decisions. This means that poor quality is resulted from poor management. Juran's message is that quality cannot happen by chance, it is to be planned. Quality planning becomes a part of "Juran Trilogy" (see figure A.2 in appendix 1) which includes; quality planning, quality control, and quality improvement (Juran, 1989).

In addition, Juran's approach is emphasis on team (quality circles and self-management teams) and project work, which can promote quality improvement, improve communication and co-ordination between management and employees (Juran, 1989). Also, improve co-ordination between employees. Additionally, Juran stresses for

“Pareto Analysis” as applied to problem solving, for work on the costing of quality, and the idea of a quality council within the organisation. Furthermore, Juran emphasises the importance of top management commitment and empowerment, participation, recognition and rewards. Freed and Klugman (1997) pointed out that Juran’s philosophy emphasises; managers must listen to employees and help them rank processes and systems that need to be improved. Also, managers must provide recognition to the whole team when a project is completed. Juran’s philosophy is used worldwide; he developed ten practical steps to quality improvement (see table A.2 in appendix 1).

2.1.3.3 Crosby’s Approach to TQM

Crosby has been a productive writer on quality, since his works are concerned with quality tools of TQM and contain many quantitative and statistical techniques. Consequently, Martin (1993) states that *“Deming is frequently described as a TQM philosopher; Crosby is often described as a TQM technician”*. Crosby is best known for his concepts of “zero defects”, “do it right the first time”, and “quality is free”. In order to realise a successful quality improvement program, Crosby (1979) identifies a number of concepts and practices include; management participation, management responsibility for quality, employee recognition, education, reduction of the cost of quality (prevention costs, appraisal costs, and failure costs), emphasise on prevention rather than after-the-event inspection, doing things right the first time, and zero defects. Moreover, Crosby offered his quality management approach in fourteen points given in appendix 1 table A.3. However, Martin (1993) points out that Crosby’s fourteen points demonstrate more practical orientation than Deming’s points. Martin adds, Crosby’s quality management approach starts with management commitment (point 1) and ends with “do it all over again” (point 14), which indicates that the pursuit of quality is never ending task.

Martin (1993) states that *“from Crosby we develop our understanding of zero-defects and the importance of “doing things right the first time”*. Also, from Crosby it could be learned that quality is a measurement of process, so by measurement can correct errors encountered process during continuous quality improvement. Crosby (1979) points out that despite vitality and importance of philosophy in TQM, successful adoption of TQM requires more than “a single gulp of philosophy”. Crosby (1979) in his book “Quality is Free” discusses that many TQM initiatives and important changes, for a number of reasons, in organisations fail. Section 2.1.5 discusses implementation successes and failures to provide deeper understanding of that issue.

2.1.3.4 Feigenbaum's Approach to TQM

Armand Feigenbaum is credited as the originator of Total Quality Control. Dale and Bunney (1999) pointed out that "if the quality costs are to be managed, they must be categorised" is the major contribution of Feigenbaum to the subject of cost of quality. Feigenbaum (1991) identifies three major categories of costs: appraisal costs, prevention costs, and failure costs. Total quality cost is the sum of such costs. Also, Feigenbaum emphasises that efforts should be made towards the prevention of poor quality rather than detecting it after the event. Lewis and Smith (1994) indicated that Feigenbaum emphasises that documentation allows visualisation and communication of work assignment. Feigenbaum (1991) argue that quality is an integral part of the day-to-day work of the line, staff, and operative of a firm. Feigenbaum further adds that there are two factors affecting product quality, first the technological factor, which includes; material, machines, and processes. Second the human factor which comprises operators, foremen, and other firm personal. Morgan and Murgatroyd (1995) stated that "*Feigenbaum argues that statistical methods must be used whenever and wherever they may be useful to the end*". Feigenbaum (1991) stresses that management must commit itself to:

- *Strengthening the quality improvement process itself.*
- *Making sure that quality improvement becomes a habit.*
- *Managing quality and cost as complementary objectives.*

Feigenbaum's best-known contribution is his ten benchmarks, as shown in Appendix 1 table A.4.

2.1.3.5 Ishikawa's Approach to TQM

Kaoru Ishikawa was born in 1915, in 1960 he became a professor at Tokyo University, and in 1985 he published his famous book: *What is Total Quality Control? The Japanese Way* (Sallis, 2002). Dale and Bunney (1999) pointed out that there are three main areas where Ishikawa contributed to quality:

1. *The simplification and widespread use of the seven basic quality control tools*
2. *The company-wide quality movement, and*
3. *Quality circles*

As mentioned in the point 1 above, Ishikawa has been associated with the development and advocacy of universal education in the seven QC tools (Ishikawa (1985). These tools are; Pareto chart, cause and effect diagram (Ishikawa diagram), stratification diagram, scatter diagram, check sheet, histogram, and control chart. See table A.5 in

appendix 1 for more details regarding quality tools and techniques. Ishikawa (1985) argues that quality management should go beyond the product and includes after-sales services; the quality of management, the quality of individuals and the company itself. Ishikawa adds that the success of a company is highly dependent on treating quality improvement as a never-ending task. Furthermore, Ishikawa (1985) considers that the assessment of customer needs serves as a tool to enhance cross-functional co-operation and selecting suppliers should be on the basis of quality rather than solely on price. Ishikawa considers also cross-functional teams are efficient and effective ways for identifying and solving quality problems.

Finally, Ishikawa provides how quality tools can play crucial role in identifying and interpreting quality problems, accordingly our decisions towards continuous quality improvement could be build on facts. Also, working through quality circles and teams in general and cross-functional teams in particular would lead to strengthen and support co-operation between different company's areas including facilitating flow of information and enhancing communication links between team members. In addition, quality management should be extended to after-sales services and not limited with quality of product.

2.1.4 TQM Tools and Techniques

TQM emphasises the importance of tools and techniques in analysing and interpreting the data required for a continuous improvement process; therefore right decisions could be based on reliable data and information (BS 7850, 1992). Additionally, the appropriate use of some or all of these tools and techniques, separately or together, can help people solve problems more effectively and make process improvements. A number of TQM tools, techniques and their benefits (synthesised from literature) are given in appendix 1 table A.5 which describes briefly each tool and technique shown. Sallis (2002) points out that TQM philosophy need to be turn to practice and develop practical means by which teams within organisation can realise quality improvement. In this context, Sallis adds that bringing together a range of tools and techniques by TQM is one of its powerful aspects, these tools and techniques are used to implement its essential concepts. Dale and Bunney (1999) indicated that quality tool and techniques should be used to facilitate improvement and be integrated with business processes. Dale and Bunney stated that:

“The use of tools and techniques helps to get the process of improvement started: employees using them to feel that they are

involved and making a contribution; quality awareness is enhanced; behaviour and attitude change starts to happen; and projects are brought to a successful conclusion”.

Furthermore, various measurements have to be carried out in order to assess the true effectiveness of TQM in the whole business system, however, TQM tools and techniques are efficient methods of findings out if customer needs are met both internally and externally (BS 7850, 1992). Sallis (2002) emphasises that it is important to find right tools and techniques for the job, and offer appropriate training for staff in their proper use. Sallis adds that effective training and practicing of quality tools and techniques could lead to develop and enhance efficient decision-making culture in the institution.

2.1.5 TQM adoption Success and Failure

During the 1980s the quality revolution encouraged companies to increase their profitability by adopting quality management methods. Flood (1993) points out that many companies have worked on quality training as a main service they can offer. Kanji and Tambi (1999) consider that, TQM as a process management tool was applied successfully in many firms in the US; these firms include IBM, Motorola and Texas Instrument. Each one of these firms achieved a quality award, which recognises the standard of their product and process quality. Despite success for TQM in industry, Harvey (1995) argues that the number of companies implementing or adopting TQM successfully was less than suggested. Harvey adds that thousands of companies are failing to implement TQM in addition to the companies that stopped running TQM programs because they do not see any positive results. However, Oakland (1993) points out that insufficient commitment from top management is one of the main reasons behind the failure of TQM implementation or adoption. Kekale (1999) notes that, most of the failures encountered TQM implementation are related to a certain method adopted within a certain environment. Also, Kekale states, *“Many different strategies, tactics, tools, and methods are used under the concept of TQM. Quality control, statistical methods, and ISO9000 standards are just some of the tools for achieving TQM that are typically used in industries”*. McAdam and Bannister (2001) introduced the following as a key failure causes among TQM implementation:

- Insufficient management commitment.
- Working on short-term plan rather than long-term plan in order to achieve quick profits.
- Using inappropriate measuring framework, since it is vital in a TQM implementation approach to measure the effect on the manufacturing processes and hence profitability.
- Inappropriate linkage between the obtained results.

Frangou (2002) points out that, the unsuccessful focus by an organisation on critical and crucial aspects of its strategic processes will prevent it achieving a good return on investment. This means, organisations should give priority to the critical areas for change in order to realise successful implementation, which eventually leads to good returns. Frangou adds another key issue for TQM implementation that, organisation must be able to learn and change in relation to the change of marketplace. Typically any institution in higher education that wants to adopt a TQM program could face such problems.

Michael *et al* (1997) claimed that after reviewing many articles, reports and studying TQM philosophy, they proposed the list given in appendix 1 table A.6 of things to do and problems to look for when adopting a TQM philosophy. However, in order to use TQM effectively and efficiently it is important to focus on totality, not to pick up or use small parts of the system (Hellsten and Klefsjo, 2000). As a result, there is no single or specific recipe for a successful adoption or implementation of TQM. The success or failure of TQM adoption is a function of complex factors lies in tangible and intangible aspects, besides the finding of efficient and effective ways to combine them towards the organisation's goals and objectives.

2.1.6 Review of Quality Award Models

Global competition leads to much awareness worldwide of the need to apply quality approaches, for example; strategic quality management, quality systems, quality assurance, and quality control, while such approaches could help users to realise competitive advantage in the market place. Many countries recognise that quality is one of the most crucial and, vital disciplines and strategies for economic development (Xie *et al*, 1998). Xie *et al* added that the ISO 9000 series offers an opportunity to many countries in different areas for achieving quality improvements and economic gains. Kartha (2004) points out that the whole idea behind the deployment of ISO 9000 series of standard was to simplify the international exchange of goods and services by developing a common set of quality standards. It is a series of standards on quality assurance and quality management. The standards are not particular to products or services, but apply to all processes. The standards are generic and therefore can be used by manufacturing and service organisations around the world.

Moreover, there are a number of purposes where quality models are used, including; promotion, education, and as a tool for managing quality analysis (Blades, 1995). In the case of education and promotion, Blades points out that models should be visual and

relevant to the idea they demonstrate, while in the case of quality analysis, quality models provide the key factors of quality implementation and their associated concepts in a form of components. Blades indicates that quality model should demonstrate three characteristics include; simplicity, this means model should be understandable, memorable and easy to use. Second, pictorially representative, while pictures are easily remembered since, “a picture is worth a thousand words” particularly for educational purposes. Finally, model must be meaningful of the concepts for which it is being used.

Many developing and developed countries established their own quality models and National Quality Awards (NQAs), such as a Malcolm Baldrige National Quality Award (MBNQA)-USA, European Quality Award (European Foundation for Quality Management-EFQM), and Deming Prize (Japan). Ghobadian and Woo (1996) described the broad aims of these awards as follows:

- Increase awareness of TQM because of its important contribution to superior competitiveness.
- Encourage systematic self-assessment against established criteria and market awareness simultaneously.
- Stimulate sharing and dissemination of information and successfully deployed quality strategies and on benefits derived from implementation these strategies.
- Promote understanding of the requirements for the attainment of quality excellence and successful deployment of TQM.
- Encourage firms to introduce a continuous improvement process.

Ghobadian and Woo added that none of awards focus on specific product or service or traditional management methods, however all of them consider a wide range of activities, behaviour and processes that influence the quality of the final offerings. Each award model is based on a perceived model of TQM approach, therefore they provide helpful framework against which organisations can assess and evaluate their TQM implementation practices, seek improvement opportunities, and the end results. Table 2.2 provides the primary elements of the three quality awards.

Table 2.2 Primary elements of the three quality awards (Deming prize, EFQM, and MBQNA) synthesised from (Deming Prize, 1996; Chelsom *et al*, 1998; Kartha, 2004 respectively)

Deming Prize	EFQM	MBQNA
<ul style="list-style-type: none"> • Policies • Organisation • Information • Standardisation • Human resources • Quality assurance • Maintenance • Improvement • Effects • Future plans 	<ul style="list-style-type: none"> • Leadership • Policy and strategy • People management • Resources • Processes • Customer satisfaction • People satisfaction • Impact on society • Business results 	<ul style="list-style-type: none"> • Leadership • Strategic planning • Customer and market focus • Information and analysis • Human resource focus • Process management • Business results

Ghobadian and Woo (1996) pointed out that the main purpose of Deming Prize is to spread the quality values by recognising performance improvements flowing from the successful implementation of organisation-wide quality control based on statistical quality control techniques. Also, Deming Prize provides an effective instrument for spreading TQM philosophy throughout the Japanese industries. In addition, the primary elements provided by Deming Prize and their associated checklist are used to evaluate the performance of senior executives (Deming Prize, 1996). This checklist emphasises the importance of top management's active participation in quality management activities and understanding of the main requirements of quality improvement programs. It also offers senior executives with a list of what they need to do. It should be noted that under each element provided by Deming Prize, a number of detailed aspects related to such element are given, besides the aspects offered by the checklist where the performance of senior executives can be assessed and evaluated effectively. For example; how well do they understand quality control, quality assurance, reliability, product liability, etc.? How well are targets and priority measures aligned with policies?

Likewise, Chelsom *et al*, (1998) claimed that the purpose of EFQM is to offer a self-appraisal methodology for any organisation to assess its quality management efforts. Chelsom *et al* (1998) added that EFQM model is broken down into nine elements (table 2.2), these nine elements are grouped into two categories named "enablers" and "results" (see table A.7 in appendix 1). It can be seen from table A.7 that the award supports, encourages, and recognises the development of effective TQM by any organisation, while the two categories (enables and results) provided by EFQM model focus on different aspects related to the processes and activities offered by organisation. This enhances the integration between different organisation's entities towards realising its goals and objectives. Regardless of sector, size, structure or maturity, to be successful, organisations need to establish an appropriate management system. The EFQM excellence model is a practical tool to help organisations do this by measuring whether they are on the path of excellence; helping them understand the gaps, and then stimulating solutions.

Additionally, MBQNA emphasises organisational self-assessments, while the criteria offered by this award have three important roles (MBQNA, 2004):

- *To help improve organisational performance practices, capabilities, and results.*
- *To facilitate communication and sharing of best practices information among all types of organisations.*

- *To serve as a working tool for understanding and managing performance and for guiding organisational planning and opportunities for learning.*

The aim of the award is to encourage American firms to improve quality, satisfy customers, and improve overall firms' performance and capabilities. Also, it can be used to assess firms current quality management practices, benchmark performance against key competitors and world-class standards, and enhance relations with suppliers and customers. MBQNA provides seven categories; a brief description of such categories is given by table A.8 in appendix 1.

Thus, the three awards provide a universal framework for evaluating aspects of TQM practices in organisations. Also, provide them a means to measure their position against a set of universal criteria, identify their strengths and weaknesses in the area of quality management practices, and business results. It could be concluded that each award has its own unique categories and emphasis; however there are some common areas for example, each award model has two parts. First is TQM implementation i.e. the enablers, second is the overall business results TQM implementation makes.

Also, the three awards emphasise the importance of leadership, human resource management, employee participation, employee education and training, processes management, strategy and policy, information and customer focus. Hackman and Wageman (1995) claimed that it is safe to assume that MBQNA winners actually have implemented the full TQM package. Based on their statement, it can be assumed that the three award winners have fully implemented TQM.

2.1.7 Review of Other Quality Models

There are many quality models provided by literature rather than quality award models given in section 2.1.6, and in order to obtain more knowledge and deeper understanding of such quality models, this section provides an overview of two quality models. These include Hoshin Kanri (Policy Deployment) Model, and Continuous Measurement and Improvement of Service Quality Model. Hoshin Kanri (Policy Deployment) Model (figure 2.2) is based on Deming cycle; Plan-Do-Check-Act (PDCA). Beecroft (1999) points out that Hoshin Kanri is a Japanese model for strategic quality planning; it is also referred to as "management by policy", "Hoshin planning", or "policy deployment". In addition, it is a methodology for planning, implementing and reviewing quality plans that are critical to the business. Chelsom *et al*, (1998) mentioned that the *Hoshin Kanri* model shows the leader in constant touch with the business environment and the

organisation, with full communication of responses and plans for continuous improvement.

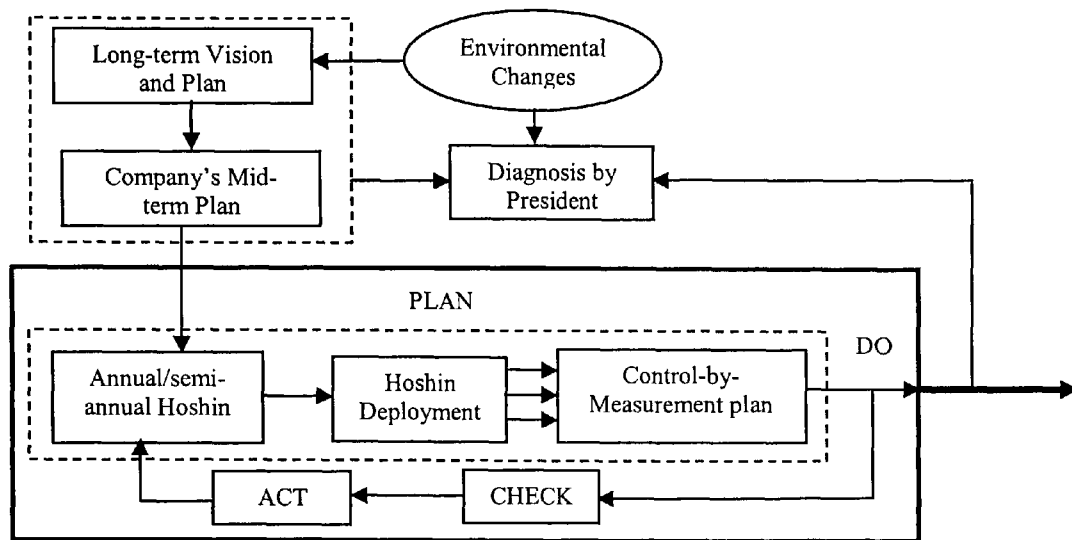


Figure 2.2 Hoshin Kanri (Policy Deployment) Model; (source adopted (Chelsom *et al*, 1998:76))

The starting point is the company vision, which will probably include new products and new markets, which are translated into goals, and both long-term and mid-term plans. Within these plans there is scope to include technology transfer and new product development, making it more comprehensive than the EFQM model. Chelsom *et al* added that there is a feedback within the organisation, using Deming plan-do-check-act cycle, ensuring that there is updating of the *Hoshin*, or plan, for process and quality improvement, and covering everything in the EFQM model in a more dynamic and holistic way.

Moreover, Beecroft (1999) stated that:

“With Hoshin kanri the process of how the objectives are to be achieved is defined. Even when the planned results are not achieved, the implementation effort is acceptable. Plans can then be modified or adjusted during the project if it becomes obvious that the goal will not be met”.

It can be seen that Hoshin model starts with senior management in which goals are assigned and then passed to middle management to determine specific projects, and then to assign these projects to implementation teams. The processes are continuously improved through PDCA cycle, where measurement and continuous evaluation takes place.

On the other hand, Continuous Measurement and Improvement of Service Quality Model (CMISQM) figure 2.3 offers a sequence of questions corresponding to the five service provider gaps (Zeithaml *et al*, 1990).

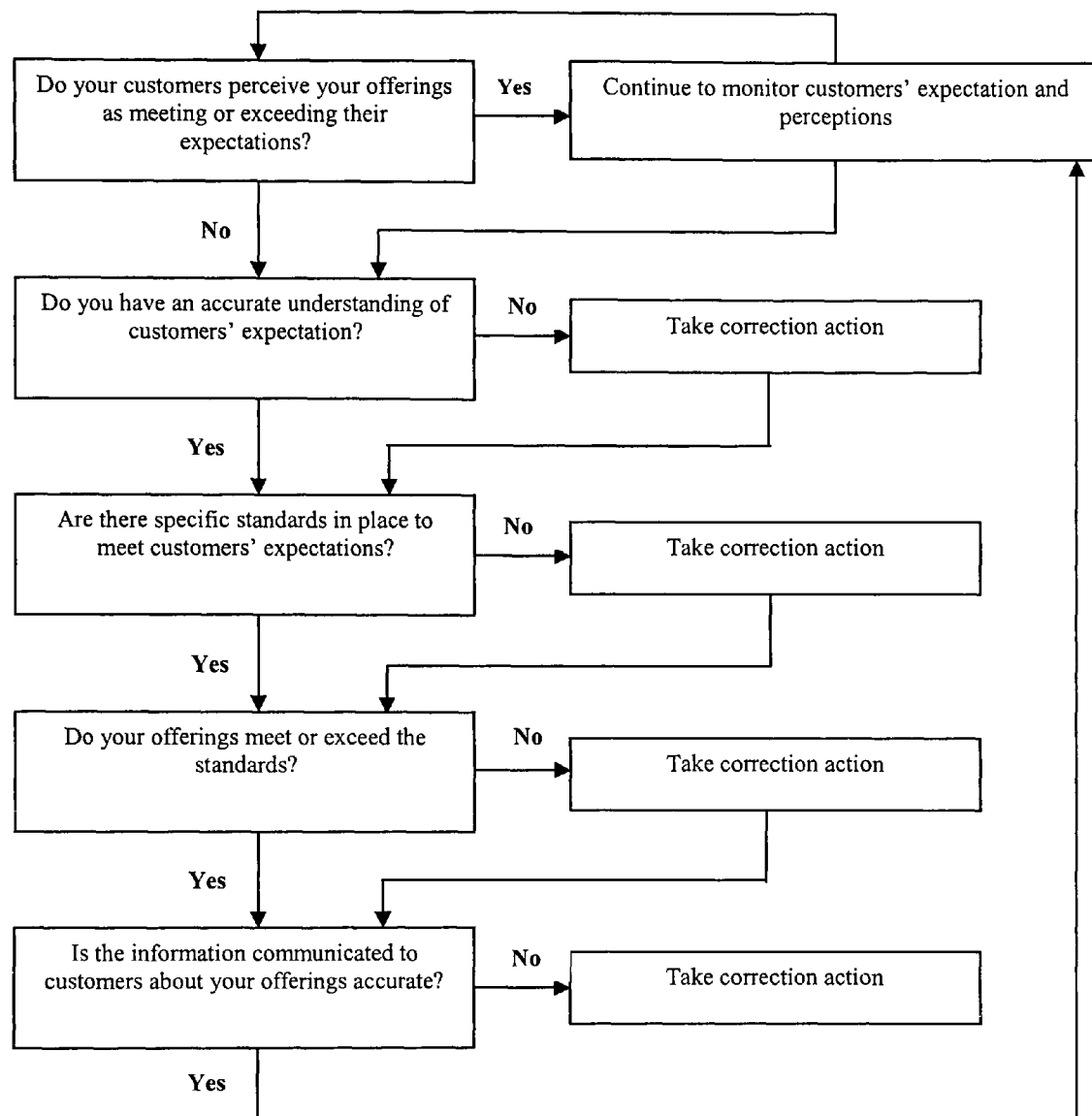


Figure 2.3 Continuous Measurement and Improvement of Service Quality Model (source adopted; Zeithaml *et al*, 1990:47)

These gaps are customers' expectations-management perceptions gap, management's perception service quality specification gap, service quality specification service delivery gap, service delivery-external communication gap, and expected service perceived service gap. As show in figure 2.3 the process starts with acquisition an understanding of the nature and extent of gap five, and then successfully searching for evidence of gaps 1 and 4, taking remedial action wherever needed.

From the above discussion, and based on what has been stated by Chelsom *et al*, (1998) regarding Hoshin model in particular, both models are emphasis a number of TQM

aspects. These include; leadership, customer focus, continuous improvement, measurement and evaluation, and processes. Despite each model have its own unique TQM aspects; however both models are sharing many TQM aspects with quality awards mentioned in section 2.1.6.

2.1.8 Summary of Part I

This part of literature review provides deep knowledge regarding different quality issues and notions. Also, it offers literature review of the concepts of quality including the concept of TQM. In addition, it demonstrates that there is no specific and universal definition of quality. Also, this part reviewed the concepts of TQM philosophy from the quality gurus' approaches. An overview of TQM tools and techniques was also given. Additionally, the three quality awards include Deming award, European Quality Award, and MBNQA have been considered. Other quality models also discussed comprises Hoshin Kanri (policy Deployment) Model, and continuous Measurement and Improvement of Service Quality Model. This part of literature survey provides a wide knowledge and better understanding of the notions and concepts of quality in general and TQM philosophy in particular. In addition, this part and the next part of literature review will help, enhance, and facilitate interpreting and analysing the research findings. Also, it will support justifying the themes of analytical framework (chapter 3).

2.2.0 Total Quality Management in Higher Education (Literature Part II)

The previous part provides a literature review of a TQM philosophy through e.g. the approaches of quality gurus and other quality writers; also it identifies a number of key TQM principles. However, the objective of this part of literature review is to discuss TQM in Higher Education (HE). This includes a brief history of HE, concept and definition of HE, challenges facing HE, and the concept of quality in HE. Also, it discusses TQM in HE and its needs, where brief attempts of adopting TQM aspects by some HEIs are given. Furthermore, this part presents the higher education and society day-to-day interaction through its three main activities include; business interaction, teaching and learning, and research activity.

In addition, factors of adopting TQM in HE will be discussed, including those factors that could hamper such adoption e.g. the concept of student as a customer, lack of understanding, staff resistance and leadership as a barrier. Additionally, this part discusses two models include European Foundation for Quality Management (EFQM) and Malcolm Baldrige National Quality Award (MBNQA)-Education Criteria, where

such models were highly adopted and practiced in HEIs in Europe and in US respectively.

2.2.1 A Brief History of Higher Education (HE)

The world's focal point for high learning has shifted over time from Greece in the classical age, to the Muslim world in the Middle Ages, then to Italy (1540-1610), England (1660-1730), France (1770-1830), Germany (1810-1920), and the United States (1920-Present) (Kerr, 1994). Boardman (1977) points out that Al-Azhar, founded in A.D. 970 can thus claim to be the oldest university in the world today. However, Tomkys (2001) mentions that universities were originally established in Italy, France, and Oxford. Hooker (1997) agrees that what we now call higher education institutions began in Bologna Paris, and Oxford in the early thirteenth century, such institutions have played a significant role in qualifying citizens to participate in the development of their countries. Hooker further adds that the modern university sees its task as providing the society with civil servants, administrators and technologists, while the medieval university existed to train churchmen, canonists, monks and friar, schoolmen and schoolmasters.

2.2.2 The Concept of Higher Education

In the developing countries the establishment of universities has become one of the main objectives for any government with a main objective of enabling people to educate, qualify, and meet the demands of the labour market. On the other hand, due to the advancement of knowledge and the revolution of information technology during the past century, the role of HE sector has developed from teaching and learning only to include research and service processes because of the changing demands of society. Accordingly, the concept of HE is changed, in this context Barnett (1992) states four dominant concepts of HE underlined contemporary approaches to, and definitions of quality:

1. *Higher education as the production of qualified manpower.*
2. *Higher education as a training for a research career.*
3. *Higher education as the efficient management of teaching provision.*
4. *Higher education as a matter of extending life chances.*

Barnett adds, in the first conception, quality tends to be identified as a function of the ability of students to succeed in the world of work. The second conception is framed by those members of the academic community who are themselves active in research, so quality is measured less in terms of the achievement of student than in the research profiles of the staff. In the third conception, Barnett states:

“Institutions are understood to be performing well if their throughput is high, given the resources at their disposal. Their total efficiency is what is in question here: not only how many students they can accommodate, but also with what velocity their students are successfully propelled into wider world. Accordingly, here, indicators of performance are sought which can capture this sense of efficiency”.

The final contemporary conception is none other than of the potential consumers of HE. The metaphor of consumption is deliberate, for on this conception HE is valued for its ability to offer opportunities to participate in the dominant institutions and to enjoy the benefits of modern society. The attempt to make HEIs fully open to and compliant to society demands in general and students' demands in particular are seen most obviously in more flexible admissions policies and practices as moves are made towards open access. However, such demands also evidenced in its effects on the curriculum. This leads to introduce new fields of study into HE and incorporate of more flexible course structures, in addition to the sufficient knowledge and skills needed by market place in order to fulfil such demands. Certainly, while there are differences across these four conceptions of HE, they also have much common. In all four conceptions, HE is a total system, in which students enter as inputs, are processed, and emerge as outputs.

Additionally, the UNESCO World Conference on Higher Education (UNESCO, 1998) defined the mission of a HE system is *“to educate, to train, to undertake research and, in particular, to contribute to the sustainable development and improvement of society as a whole”*. Also, (UNESCO, 1998) noted that HE, *“should be preserved, reinforced and further expanded, namely to educate highly qualified graduates and responsible citizens and to provide opportunities for higher learning and for learning throughout life”*. In a chronological sense, UNDP (2003) mentions that some consider HE to be the studies offered by the institutions after secondary school. At the end of such studies (the final output of the programme), an institution provides a certificate or a degree like Diploma, Bachelor, Master or Ph.D. For the purpose of this research, a higher education institution (HEI) will be defined as any university providing a minimum of a Bachelor programme within a period of a minimum three years. The word ‘university’ will be used synonymously with a HEI in this research.

2.2.3 Challenges Facing Higher Education

Higher education around the world, and in the developing countries in particular (Libya is one of these countries) faced a number of challenges by the end of the last century. Some of these challenges are related to the remarkable changes in population growth

and fast changes in the development of knowledge and technology. The BRITISH GOVERNMENT WHITE PAPER (2003) states that higher education in UK face hard choices on funding, quality and management:

- *Higher education must expand to meet rising skill needs.*
- *The social class gap among those entering university remains too wide.*
- *Many of our economic competitors invest more in higher education.*
- *Universities are struggling to employ the best academics.*
- *Funding per student fell 36 per cent between 1989 and 1997.*
- *The investment backlog in teaching and research facilities is estimated at £8 billion.*
- *Universities need stronger links with business and economy.*

The BRITISH GOVERNMENT WHITE PAPER adds that undertaking these challenges needs a long-term strategy for investment and reform. Another challenge facing higher educational institutions is to employ their research more effectively in order to support the business sectors. For example, Lambert (2003) in his review of business-University collaboration considered that UK business research is focused on a limited range of industrial sectors, and a small number of large companies. In addition, Lambert states, *“The main challenge for UK is not about how to increase the supply of commercial ideas from the universities into business. In stead, the question is about how to raise the overall level of demand by business for research from all sources”*. Sawyerr (2000) points out that the increased mobility and extended market for high-skill labour, besides the emergence of new organisational forms related to rapid evolution in technology comprise another challenge for higher education. Providing high quality education is the key element of success for higher educational institutions in facing such challenges. Seymour (1992), considers four driving forces behind why higher educational institutions are concerned about quality, these forces are: competition, costs, accountability, and service orientation. Campbell and Rozsnyai (2002) mentioned that in some countries, the traditional providers of higher education are facing competition from transnational education providers as well as from the emergence of local commercial providers. Campbell and Rozsnyai added that through the internationalisation of higher education national systems, qualifications and individual higher education institutions have become exposed to the wider world. This exposure has stimulated a demand for better information and transparency about quality and standards in order to attract and retain students and staff, both national and international students, and to secure the recognition of qualifications.

Consequently, higher education sectors particularly in developing countries should adopt a new strategy to cope with the new challenges. At the same time colleges and universities must be aware of their graduates and services provided, since the world of work for which they are preparing their students is under continuous dramatic changes (Sims and Sims, 1995). Sims and Sims further suggested that higher educational institutions must move toward a learning environment that emphasises an involvement which will empower the student with a high quality. There is a general agreement that higher education is facing a lot of challenges either internally (e.g. funding, quality of teaching and learning methods that could meet the rising in skill needs) or externally (e.g. how to get strong links with business and economy). However, high quality of education could play a crucial role to help universities dealing with such challenges. On the other hand, Libyan HE is not isolated from facing the challenges mentioned above. Hence, such challenges are considered to be one of the research motivations.

2.2.4 The Concept of Quality in Higher Education

As mentioned in section 2.1.1 that there is no commonly accepted definition of quality. Also, defining quality in higher education has proved to be a challenging task. Cheng and Tam (1997) suggest that “*education quality is a rather vague and controversial concept*” and Pounder (1999) argues that quality is a “*notoriously ambiguous term*”. However, there have been various views regarding the definition of quality in HE. Many agreed with the ‘fitness for purpose’ definition for HE (Tang and Zairi, 1998; Waston, 1995; Middlehurst, 1995). In this context Campbell and Rozsnyai (2002) point out that the concept of quality has been defined in several ways:

- *Quality as excellence.* This definition is considered to be the traditional academic view that holds as its goal to be the best.
- *Quality as zero errors.* This is defined most easily in mass industry in which product specifications can be established in detail, and standardised measurements of uniform products can show conformity to them. As the products of higher education, the graduates, are not expected to be identical, this view is not always considered to be applicable to higher education.
- *Quality as fitness for purposes.* This approach requires that the product or service has conformity with customer needs, requirements, or desires.
- *Quality as transformation.* This concept focuses firmly on the learners: the better the higher education institution, the more it achieves the goal of empowering students with specific skills, knowledge and attitudes which enable them to live and work in the knowledge society.
- *Quality as threshold.* Defining a threshold for quality means setting certain norms and criteria. Any institution that reaches these norms and criteria is deemed to be of quality.

- *Quality as value for money.* The notion of accountability is central to this definition of quality with accountability being based on the need for restraint in public expenditure.
- *Quality as enhancement or improvement.* This concept emphasises the pursuit of continuous improvement and is predicated on the notion that achieving quality is central to the academic ethos and that it is academics themselves who know best what quality is at any point in time.

The definitions stem from different approaches, and reflect different implementations.

Additionally, UNESCO (1998) declared that:

“Quality in higher education is a multidimensional concept, which should embrace all its functions and activities: teaching and academic programmes, research and scholarship, staffing, students, infrastructure and academic environment. Particular attention should be paid to the advancement of knowledge through research”.

This definition could be further explained by viewing other related elements concerning the value added in general and, in teaching and research in particular. The value added in HE focused on developing the talents of individuals and the additional knowledge and skills gained by individuals through study, research or work at the university (Tang and Zairi, 1998). Waston (1995) explains it as the transformative action or the qualitative change in student and faculty. From the teaching aspect, which is the main issue in HE, ‘knowledge’ is the main quality issue. Deming (2002) points out that the first requisite for a good teacher was that he/she had something to teach. The teacher’s aim is to give inspiration and direction to students for further study. To achieve this, a teacher should possess knowledge of the subject. Deming adds that the only operational definition of knowledge requisite for teaching is research. This indicates that research is an input to support and enhance the faculty’s ability to teach. Also the quality of research should satisfy university customers through creation of knowledge.

However, Mizikaci (2006) points out that the term quality, as used in industry and business, needed to be re-defined relevant to the higher education context. One way to fulfil this is to approach it through scientific methods. Mizikaci adds that two of the advocates of appropriateness issue are Lewis and Smith (1994). In their book, after the discussion of the issue, they exemplify the implementation of quality principles at Ohio State University. According to Lewis and Smith (1994) (cited in Mizikaci (2006:39)), principles and concepts of quality are compatible with the best tradition and practices of higher education. The underlying philosophy, values, and norms reflected in quality systems are appropriate to higher education. These include:

- *An emphasis on service;*
- *Anticipating and meeting the needs and expectations of the constituents;*
- *Recognizing and improving transformation processes and systems;*
- *Implementing teamwork and collaboration;*
- *Instituting management based on leadership, knowledge-based decisions, and involvement;*
- *Solving problems based on systematic identification of facts and the use of feedback systems and statistical methods or tools; and*
- *Implementing a genuine respect for and development of human resources – the people who work in colleges and universities*

Such aspects need to be considered by any organisation include HEI. Therefore, quality is an elusive concept, where all have an instinctive understanding of what it means but it is difficult to articulate (Green, 1994). Reeves and Bender (1994) have concluded that the search for a universal definition of quality has been unsuccessful.

2.2.5 TQM in Higher Education and its Needs

Many challenges facing HE around the world (see section 2.2.3), since HE come under a lot of pressure from various stakeholders like students, governments, businesses, and the society as a whole. Such pressures translate into reasons for popularity of the quality concern in HE and drive the adoption of TQM in HEIs. TQM came to higher education from business and industrial communities. Due to the impact of globalisation and the dramatic changes in the economic environment, organisations are becoming more heavily dependent on each other to achieve their goals. Consequently, HEIs are not alone in forming the future of their graduates. Therefore, organisations can learn how to work together through various common links. One of these important links is quality.

Moreover, HEIs have now encountered some changes in their roles. The nature of universities has witnessed changes, since they became very much places where people come to obtain the qualifications that will get them a good job rather than places of highest academic thought (Gary and Hoy, 1989). Gary and Hoy added that there is no relation between the subject of the degree and the type of job that could be obtained by many graduates. Therefore, HEIs should consider the needs of employers, who seek skilled and well-trained people. This leads colleges and universities to emphasise the quality of their graduates and services in order to satisfy their stakeholders, societies and marketplace.

Accordingly, HEIs turned their attention to the business community in order to identify suitable strategies to tackle the problems encountered owing to the new situation (Waters, 1995). One of these strategies to embrace quality into their processes is TQM

as an approach for surviving and achieving competitive advantage. In addition Unal (1997) states, “In the early 1990s TQM began to attract the attention of academics in higher education who saw its potential to increase the efficiency of the education offered in universities and colleges”. While, universities and colleges are influenced by critical factors that could negatively impact their educational processes, these factors include student grades, funding, and complaints from employers and parents (Kanji and Tambi 1999). Adomaitiene and Ruzevicius (1999) considered that there are two aspects to be examined when applying TQM in higher education. First TQM implementation as a teaching course, the teaching of quality is vital in higher education because of global competitiveness and the nature of quality as a way of thinking. The second aspect of TQM implementation in higher education is its usage for assurance of teaching and research quality.

Moreover, professionals in educational sectors have learned from those in industry with regard to quality management concepts (Johnson and Golomski, 1999). Lewis and Smith (1994) point out that total quality could be appropriate for higher education, since it provides the following vital strategic principles, for example:

- It recognises the importance of continuous development of the people.
- It is able to link traditional separate parts (e.g. administration and classroom), since it offers principles relevant to both of them.
- It helps in building effective and efficient higher educational institutions, able to meet the challenges encountered with the twenty-first century.

Johnson and Golomski (1999) introduced the following four main issues concerning the quality concepts in Universities:

- *Incorporate of quality concepts in the curriculum.*
- *Using quality concepts to improve educational administration.*
- *Using quality concepts to improve the teaching of any subject.*
- *Quality concepts in doing research.*

Johnson and Golomski added the following six quality concepts for education based on quality management principles:

- *Leadership.*
- *Understanding stakeholders.*
- *Factual approach to decision making.*
- *Involvement of people.*
- *Process approach.*
- *Continual improvement.*

Consequently, educational professionals have always claimed to pay attention to quality. The vital difference between a good university and a poor one is the way of managing its administrative and teaching processes.

It is well known that TQM was created and grown-up in the business and manufacturing environments, where quality is what satisfies customer. Indeed TQM could be appropriate for HE, but with some modifications in order to recognise some aspects exceptionally related to education (Unal, 1997). Unal added that, while quality in manufacturing is what the customer says, the situation in education is different (see section 2.2.7.1 student as a customer). For example the product's concept in education is different and not in the same sense as in manufacturing fields. Therefore, if customers are happy with the product and service, this specifies that quality is acceptable.

Yet, Giertz (2000) mentions that there is a similarity between HE today and the first stage in evolution of quality work, this similarity lies in a regular usage of inspection in HE at the end of process to control and assure quality, where for example examinations take place at the end of the course. Moreover, Sallis (2002) considered that inspection and testing are widely applied in education to ensure that the quality standards of teaching and learning are being met. This indicates that inspection as a method of evaluation and assessing quality in HE is still reliable, which is contrary to the basics of TQM that emphasise self-assessment rather than inspection. As a result, the uniqueness should be considered regarding the adoption of TQM in HE.

From the above discussion, TQM is a much needed approach for HEIs to find new methods or improve and enhance the quality of their provided processes and activities that include all areas of functioning, teaching and learning, researching, community services, and in internal support services, to be more efficient, effective, operative and competent. The following sections 2.2.5.1, 2.2.5.2, and 2.2.5.3 provide in brief the attempts of some HEIs regarding adoption of the TQM aspects.

2.2.5.1 Oregon State University (OSU)

Unal (1997) mentions that, the common driving force in US higher education to seek new management strategy is the commercial competition forced by dramatic changes in economics. Competition resulted from the following:

1. Development of the global education market.
2. Reduction in government funding.

For public organisations it was vital to look for alternative financial resources to sort out the problems resulting from the reduction in governmental funds. Some of them reduced

the salaries of staff and increased tuition fees, while others increase the number of student without improving quality. One of the universities that faced such problems was Oregon State University (OSU), where the government cut its funds by thirty five percent.

OSU is one of the HEIs in the US that accomplished success in the implementation of TQM. Coate (1993), states that OSU started its implementation by focusing top management on the following steps as a strategic improvement plan:

- *Defining the mission.*
- *Understanding customers.*
- *Identifying the critical processes.*
- *Developing the Vision.*
- *Identifying breakthrough items.*

Coate (1993) further adds that OSU realise its goals and coped with problems faced throughout its TQM success journey since time has been saved, costs have been reduced, people have been empowered at all levels, and morale has dramatically improved.

2.2.5.2 Carlson School of Management (CSOM)

According to Bell (1995), CSOM at the University of Minnesota (USA) has been trying hard for long time to embrace principles of TQM into all of its operations. As a preliminary step to identify total quality at the school, a quality management elective course has been offered to the Master of business administration (MBA) students. This course has become essential for all full-time MBA students. In addition, the school introduced total quality tools and techniques to support teaching processes and evaluation of courses.

Bell adds that Quality Leadership Centre (QLC) was created in CSOM, where the role of this centre is to make quality-centred research a centre of attention across many disciplines within the school. Furthermore, the centre invited many total quality experts from industry and education together in order to share experiences. Bell further adds that in the spring of 1993 a Career Services Centre (CSC) was established. The purpose of this centre is to help students in carrying out their searches for jobs. The team of CSC in the first meeting reviewed all of the steps in the TQM problem-solving model that has been implemented. During their work as a team they agreed to the following ground rules:

- *All decisions are made by consensus.*
- *Sensitive issues are confidential.*

- *Listen to others.*
- *Be prepared for the meeting.*
- *Be on time.*
- *Contribute activity.*
- *Improve how the group works together as a team.*
- *Support the TQM process.*
- *Keep records of our work.*

Consequently, the team learned a lot from their journey towards implementing TQM process; the things that the CSC team has learned include the following:

- *You must really listen to the customer.*
- *Pay attention to the data.*
- *Every process can be improved.*
- *Do not blame people for process problems.*
- *Quality improvement takes a lot of time, energy, and commitment.*

The TQM process on which CSC worked has been redesigned twice to be able to meet the requirements and to achieve the desired objectives, since the first attempt was ineffective. As a result, it makes the staff more flexible to respond to changing realities. Moreover, the second redesign was executed in a relatively short time without staff resistance. This indicates that the TQM process has effectively changed the method the CSC team approaches its work.

2.2.5.3 Other Attempts at Adopting Aspects of TQM in HE

There are many other successful attempts in the literature regarding TQM aspects of adoption in HE. For example in the UK Unal (1997) points out that the first attempts took place in the early 1990s and it suggests De Montfort University is considered one of the successful attempts in adopting aspects of TQM in the UK, since this University was able to achieve the following:

- Reviewed and revised the traditional teaching methods and courses that do not fit the challenges encountered with the 21st century. The effectiveness of this work was widely recognised by industry, students and other design faculties.
- The efficiency of teaching staff was increased by 30 percent with double the number of students.
- The productivity of academic staff was increased.

The universities of Wolverhampton, Aston, South Bank, De Montfort and Ulster have developed TQM approaches (Kanji and Tambi, 1999). Unal (1997) and Lomas (2004) point out that South Bank University started its TQM program by reviewing both the academic quality and services quality provided by it. In addition, it decides at early

stages that students should be involved more actively in the learning process. Changing the culture of an institution is one of the most important achievements realised by the South Bank University TQM program, while all staff accepts their personal responsibility for quality improvement as a natural part of their job. Doherty (1993) summaries what have been found from the experience of the University of Wolverhampton towards TQM:

- *Total commitment form the top is essential*
- *Try to develop ownership*
- *Prepare enough, but not too much – have a plan but get started as soon as possible*
- *Be flexible- do not be afraid to change the plan*
- *Try to communicate effectively - the bigger the organisation, the more difficult this becomes*
- *Give examples of good, successful practice-one bit of good news is worth more than a volume of words*
- *Emphasise the gain – no change without gain*
- *Above all be positive. But do not promise the impossible – remember everything must be done within your resource envelope.*

The examples given above reflect some experiences of HEIs regarding the adoption of TQM aspects; this indicates that TQM is an appropriate and suitable strategic management approach for HEIs. Since, many HEIs in different places around the world have accomplished successful implementation of TQM aspects. These HEIs realise that they can achieve remarkable benefits from the adoption of a TQM approach. Furthermore, introducing total quality in the schools of HEIs as an elective or essential course (or module) could lead to embed better understanding of the principles and philosophy of total quality in such institutions. A number of HEIs were able to use TQM effectively and tackled many educational and administrative issues encountered to their processes. In addition, the efficient use of TQM tools and techniques could play a vital role to support and evaluate different processes in HEIs.

2.2.6 Higher Education and Society Day-to-Day Interaction

Higher education is the highest level of education, aimed to prepare and provide people with high-level skills in different fields needed and required by society. In addition, HE offers an efficient consultancy, and technical services to the institutions of this society. Power (2001) points out that HE is primarily concerned with the transmission and development of knowledge at the most advanced stages of learning and research.

2.2.6.1 Higher Educations and Business Interaction

In light of the vital role that HEI can play in the society, Ashcroft (2003) states three main purposes of universities:

1. *Questioning, and so the protection of democracy.*
2. *The creation and transfer of new knowledge and practice.*
3. *The creation of today's and tomorrow's notions of professionalism.*

Ashcroft considers the first purpose is the most important one, while it protects the democracy and minority views. In addition, universities' autonomy should be protected for instance from direct interference of governments through funding and quality assessments (e.g. funding councils and quality assurance agency (QAA) in the UK). The second purpose enables universities to face and challenge orthodoxies and create novelties through envisioning new approaches of problems and issues. In addition, to servicing the economy and society, universities also shape the economy and society into what it could and should be. For the third purpose, universities have responsibility to act ethically as well as in an educationally justifiable ways. Also, universities influence students and other stakeholders towards notions of professional standards including moral ones.

In the business-university collaboration, Lambert (2003) points out concerning the above second purpose that economic and social returns increase from this investment between universities, business and the wider community. Lambert adds that networks, sponsored students, contract research, collaborative research and consultancy could play a crucial role in promoting knowledge transfer. Networks provide a good opportunity for academics and business people to meet, discuss, share ideas and find innovative ways to develop partnerships. Through network, more interaction between academics and business people could be realised, hence supporting knowledge transfer. In addition, building a strong link with businesses, universities need to develop a network with their graduates in companies in order to build closer relationship with them in the business community. Some companies sponsor individual students. However in the UK more businesses could benefit from working with university departments and students, but the difficulty lies in raising awareness in businesses of the expertise that exists in the UK universities.

Lambert further adds that the London Technology Network (LTN) is an example that provides a vital link between researchers in universities and businesses. The LTN offer advises about how London universities can help companies to achieve their goals.

Contract research also is another form of collaboration between universities and businesses in which business pays the university researchers for a specific piece of research on its behalf. Another crucial form of collaboration is called collaborative research, where both researchers from business and university are working together on a shared problem. In the UK for example practising consultancy as another activity provided by universities in which expert advice or analysis services provided, their total income was estimated at around £100m in 2000-01 (Lambert 2003). Moreover, Roberts' review (2002) points out that university need to be practical in ensuring that courses are as relevant to business as possible. Also, the review suggests e.g. in the UK, businesses must become more actively involved in university course design. Consequently, this indicates how knowledge transfer is important; since it supports universities through linking them with day to day reality. In addition, business sector could earn more through strengthen their competitive advantages by developing and improving their products and services.

Nevertheless, UNDP (2003) emphasise the knowledge gap in the Arab countries. More than 175 universities in the Arab region, more than 50,000 professors in the field of science and technology (S&T) that have trained a total of 10m university graduates, 700,000 engineers out of them, Yet S&T output in the Arab region is unsatisfactory due to the following reasons: (Weiss, 2003)

- *Insufficient public and private funding.*
- *Absence of national S&T strategies even in vital areas such as water resources, desalination, and environmental degradation.*

In spite of around 126 specialised scientific research centres attached to Arab universities, research projects often lack clear objectives, a sharp focus on results, this leads to inability to transfer results into investment projects (UNDP, 2003). Also, in the Arab countries there is a lack of communication between academic community and the business world.

Therefore, in the absence of effective knowledge transfer constituents within the Arab countries (e.g. Libya) including their HEIs, it could be concluded that it is essential to establish long-term strategy for developing research communities. In addition, provide sufficient funding, build an efficient and effective links and co-operation with similar advanced research communities (e.g. in Europe and US). Also, encourage thousands of graduates who have succeeded as researchers in the developed countries to contribute in establishing strong scientific and research base. Arab students in developed countries

should start establishing graduates network before they return home after completion of their studies.

Thus, knowledge transfer is considered one of the critical pillars in effective interaction between HEIs and other sectors of society. Also it generates a return on the investment of public funds in the science research base. In addition, it enables the University to offer a broader learning experience to students and researchers, enhance application, while maintaining the core academic mission. Knowledge transfer also offers business sector an opportunity to acquire knowledge and expertise. This could be realised through working together with academic and recent graduates on a project that has strategic impact on a companies. In addition, Knowledge transfer helps people to develop new skills, relationships and built new partnership, these leads to reinforce their day-to-day interaction.

2.2.6.2 Teaching and Learning in HE

The teaching and learning (T&L) operation is the cornerstone of any HEI's function. The challenge that faces the HE environment has always been to ensure that the quality of T&L is maintained. Develop the capability of students and provide them with the required knowledge and skills needed for their professional life is the critical aim of higher education. Therefore, institution should consider new techniques that place emphasis on quality T&L. Indeed, methods of T&L and the capability of teachers to interest learners is the core of the quality of T&L process in HEIs. Quality enhancement in T&L has always been and remains one of the principles concerns of institutions, their staff and student, and of external professional bodies and learned societies (TQEC, 2003). Moreover, the BRITISH GOVERNMENT WHITE PAPER (2003) states, *"Effective teaching and learning is essential if we are to promote excellence and opportunity in higher education. High quality teaching must be recognised and rewarded, and best practice shared"*. This would encourage teachers to provide good quality of teaching which impacts positively on learning processes and eventually the quality processes as a whole.

TQM is an approach that prepares an environment of discussion (through stressing on open communication, empowerment and involvement between teachers (lecturers) and students and involves the latter in finding different ways of learning. Any institution would benefit from developing an environment in which the process of T&L is planned, executed, and checked, followed by actions in order to create self-assessment (Hoy *et al*, 2000). Deming's cycle PDCA (plan, do, check, and action) (see figure A.1 in

appendix 1) for continuous quality improvement process could be beneficial to T&L process (Hoy *et al*, 2000; Saunders and Walker, 1991): *Plan*: defines the learning process, ensures documentation and sets measurable objectives against it. *Do*: executes the process and collects the data and knowledge needed. *Check*: analyses the data in suitable format and justify the action taken. *Act*: right action should be done using quality learning techniques and methods, and assesses future plans. Saunders and Walker (1991) point out that by emphasising the essential idea of process improvement, rather than specific techniques, the PDCA cycle encourages the choice of the correct techniques for solving the problem.

The University Enterprise Partnership Project (UE-TQM-P) is a project conducted by a number of companies and institutions of HE in England, Belgium, Finland, and the Netherlands. This project concluded that the most important thing that HEIs could do to prepare students for a business environment characterised by the use of TQM concepts was to use those same TQM concepts in their institutions and in their classes, particularly in those that teach TQM. Furthermore, Van Kemenade and Garre (2000) state

“The courses that aim to generate TQM skills and attitudes among their graduates should themselves ideally serve as role models and implement TQM thinking in practice....In the other words, the student, as the most important interest party within educational institution, should be able to actively experience how a learning organisation with a constructive and customer oriented TQM culture actually functions”.

Moreover, in the UK for example there are other initiatives of quality enhancement in T&L operations. Teaching quality enhancement committee (TQEC) reviews the arrangements for support of quality enhancement (QE) in T&L in the UK HE (TQEC, 2003). The review of TQEC lies mainly on identifying any gaps or overlaps in the work of the four main agencies in this field, QAA, HEA (Higher Education Academy), LTSN (Learning and Teaching Support Network), and HESDA (Higher Education Staff Development Agency). Also, to seek ways of improving effectiveness and values for money. In addition, TQEF (Teaching Quality Enhancement Fund) is an integrated fund to contribute to the delivery of Higher Education Funding Council for England (HEFCE) teaching and learning strategy (HEFCE, 2002a). The strategy of HEFCE teaching and learning has five main purposes:

- *Encouragement and reward to increase the status of T&L, reward high quality, and help those with potential to achieve high quality.*

- *Disseminating and embedding good practice.*
- *Co-ordination and collaboration.*
- *Research and innovation.*
- *Building capacity for change.*

Additionally, in the context of T&L quality enhancement in the UK for example, LTSN aims to (HEFCE, 2002a):

- *Promote and transfer high quality T&L practice in all subject disciplines.*
- *Provide a 'one stop shop of T&L resources and information for the whole HE community.*
- *Develop and support networks of practitioners.*

Through these aims LTSN plays an important role in enhancing and supporting quality T&L in the UK. It also, provides development opportunities to all who work in teaching or the support of learning in UK higher education. Furthermore, HEA contributes effectively to quality enhancement by defining entry standards and accrediting qualifying training for individual members (TQEC, 2003). Also, it contributes by providing advice and services to its members.

Moreover, there is an increasing use and reliance on technology in promoting T&L process; in the UK for example Funding Councils, the Joint Information Systems Committee (JISC), LTSN, HEA, and the Association for Learning Technologies are supporting and funding such technology (HEFCE, 2002b). These funding bodies encourage the use of information communication technology (ICT) within T&L. this encouragement is through funding long-term projects such as HEFCE's computers in teaching initiative, Teaching and Learning Technology Programme (TLTP) and TQEF. Also HEFCE (2002b), points out that JISC supports HEIs through various initiatives. For example, the access to T&L resources and their project enhancing JISC data services for T&L. So, all of these initiatives support and help HEIs in the UK who seek to incorporate and develop ICT within T&L practices.

Furthermore, QAA (2002) defines the objectives of its external review process in terms such as the promotion of HE in T&L and as a means of securing accountability for the use of public funds received by HEIs. In addition, QAA contributes to quality enhancement through measuring and reflecting quality, establishing benchmarks for standards and quality assurance criteria and producing codes for practice.

Additionally, student satisfaction surveys are another effective approach for quality enhancement in HEIs in general and T&L process in particular. In addition, students' views on all aspects of their higher education experiences are now being widely

surveyed and considered as essential to the effective monitoring of quality in HEIs. Students' views will form some of the wide range of data that will be in the public domain, so that members of the various higher education stakeholders groups have the information to make judgements about levels of performance in particular universities (HEFCE, 2002c).

Course Experience Questionnaire (CEQ) was designed to be a performance indicator of student satisfaction (Ramsden, 1991). Also, it is an important instrument for measuring student satisfaction. Ramsden adds that the CEQ has shown itself to be a robust and flexible instrument with wide acceptance. Its validity as a measurement of university teaching quality has been confirmed by Australian and overseas researchers (Richardson, 1994). Moreover, Gregory *et al* (1995) state *"the questionnaire has proved to be a very useful instrument in identifying overall areas of weakness which motivated further investigation. It can initiate the process of research and change which is at the heart of improvements in teaching and learning"*. Also, customer orientation is a key idea in TQM, and students are primary customers for HEIs. Measuring student's perceived quality and satisfaction is essential for continuous improvement of study programmes, teaching and support services.

In the UK for example, National Student Survey (NSS) is used to get feedback information about quality of students' courses mainly for two reasons (HEFCE, 2004):

- *To help inform the choices of future applicants to higher education.*
- *To contribute to public accountability.*

This indicates that NSS plays important role in the quality improvement of the courses provided.

In contrast, Rowley (2003) argues that, despite importance of students' survey as an instrument of gathering data on student perceptions regarding teaching and learning process. However, there is a considerable level of disagreement about the value of such survey. In addition, Rowley points out many factors that may affect evaluation outcomes, for example; level of course, subject area, and workload. Also, student satisfaction is decreased when class size is large and in obligatory modules rather than optional ones. Rowley further adds that the characteristics of students (ethnic, background, gender, and age) are considerable influences on student ratings. Although, HEIs should find some way to listen to their students either using questionnaires or surveys in spite of their limitation, since they are the only ways to seek to surface opinions scientifically across the student body.

2.2.6.3 Research Activities in HE

Research is one of the universities' distinct activities besides teaching and consultancy. A university is in its fundamental nature a place of learning for staff as well as students. This could be accomplished through the research activity where university can achieve, introduce and develop new knowledge. Jaber (2000) points out that university throughout these activities can contribute effectively in tackling many important issues that could face society's development. Dearing (1997) identifies four distinct purposes for research in HE. These are:

- *To add to the sum of human knowledge and understanding;*
- *To inform and enhance teaching;*
- *To generate useful knowledge and inventions in support of wealth criterion and an improved quality of life;*
- *To create an environment in which researchers can be encouraged, and given a high level of training*

Governments supply much of the research funding for public universities. Accordingly, governments need to know that its money is being well spent. So, governments should develop some mechanism in order to assess how this money spent. Saunders and Walker (1991) point out that one of the aspects of such mechanism is a quality report from university that gives a clear picture of activities, plans, expenditure and capabilities.

Moreover, in the UK for example, the main purpose of Research Assessment Exercise (RAE) is to provide ratings of the quality of research conducted in HEIs in the UK (HERO, 2002). In addition, this would help HE funding bodies to distribute public funds effectively. RAE (2001) states that public funding for research in the UK HEIs is provided through two sources (dual support system) whereby:

- *Funding for the research infrastructure (staff salaries, premises, computing and library costs, for example) is provided by the four UK funding bodies (Higher Education Funding Council for England (HEFCE), Scottish Higher education Funding Council (SHEFC), Higher Education Funding Council for Wales (HEFCW), and for Northern Ireland, the Department of Higher and Further Education, Training and Employment (DHFETE) while,*
- *The costs of individual research projects are funded by the six Research Councils and the Arts and Humanities Research Board (AHRB), (it should be noted that AHRB becomes a full research council as AHRC few years ago).*

Outcomes presented by RAE concerning research quality assessment are published in order to provide public information on the quality research in HEIs throughout the UK. This information could help other research funding sources. For example, business and

industry, charities and other organisations that sponsor research, and give them indication of the relative quality and importance of academic research (RAE, 2001). Therefore, such research quality assessment helps research sponsors how to distribute their money effectively and efficiently. Also, encourage researchers and universities to focus on the research quality in order to realise competitive advantage and enables them to contribute in the knowledge development.

Based on the discussion provided by sections 1.1 and 1.2 in chapter 1 and sections 2.2.6.1, 2.2.6.2, and 2.2.6.3 in this chapter, the following points could be concluded regarding the three main activities offered by HEIs. Such activities include business interaction, teaching and learning, and research activity. These points provide a summary of considerable aspects that could help HEIs with special focus on Arab HEIs includes Libyan HEIs to improve the quality of their activities.

For instances in business interaction:

- Strong link need to be created between HEIs and business sector, through e.g. networks, contract research, collaborative research and consultancy. This could be achieved by forming teams from different sectors and through establishing effective links of communication between them. Also through mutual training, exchange knowledge and information to enhance quality of research and co-operation between them.
- Arab HEIs should build clear relationship with their graduates who work in business and industry sectors. This comprises a part of involvement, where graduates could play vital role in strengthen the bridge between business, industry sectors and HEIs, since such sectors are employers (stakeholders of HEIs) of graduates. Also, graduates can identify the problems encountered with such sectors and work with their universities (collaborative research) to solve such problems and enhance TQM notions. For example, teamwork, open communication, involvement and empowerment, training and education, and continuous improvement.
- Experts like Lambert (2003) and Salama (2001) suggest that courses provided by HEIs should be relevant to the business and industrial activities. This could be effectively achieved by involving business and industrial sectors in HEIs course design. In this context, TQM approach emphasises notions such as

empowerment of internal stakeholders (e.g. students in learning processes) and involvement of external stakeholders (e.g. employers in course design).

- Teaching TQM concepts in the Arab HEIs will help them preparing their students for business environment.
- Encourage Arab students in developed countries to establish graduates network in order to enhance knowledge transfer aspects. This activity enhances the notion of training and education which stressed by TQM approach. Also, those graduates will learn from each other through exchanging information and ideas

In teaching and learning processes, HEIs should consider the following:

- New methods, techniques, and technology that places emphasis on quality of teaching and learning.
- High quality teaching must be recognised and rewarded.
- Using TQM approach in order to prepare an environment between lecturers and students through open communication and, involvement and empowerment.
- Using TQM tools and techniques to support continuous improvement processes, encourage self-assessment environment and enhance management by fact.
- Establishing committees, networks and programmes that could support quality enhancement in teaching and learning, and help all who works in teaching.
- Creating bodies as a means of securing accountability for the use of public funds received by HEIs for teaching and learning.
- Using student satisfaction surveys for quality enhancement in HEIs in general and teaching and learning processes in particular.

While in research activities, HEIs should take in to account:

- Sufficient funds should be offered in order to support effectively the research activities in the HEIs. In this context Freed and Klugman (1998) pointed out that it is necessary for HEIs to have sufficient financial resources in order to get the movement off the ground and continuously support quality enhancement efforts. However, Arab HEIs financers (e.g. governments, other private institutions) should understand that costs are associated with poor quality.
- There should be a strong correlation between the research conducted by the HEIs and the needs of their society. The total quality considers a wide range of beneficiaries and stakeholders. For example, society and business and not just

the internal customers of the university e.g. students, faculty and staff (Scrabec, 2000).

- Research activities should be assessed from quality point of view by professional body and provide public information. Government or/and other financiers who supply the research funding have right to know their money is being well spent. Accordingly, there should be some mechanism for assessing how this money spent. One of such mechanism's aspects is a quality report from university (self-assessment report) or/and from external body that gives a clear picture of activities, plans, expenditure and capabilities.
- Establishing new information systems and networks to enhance the research activities. This will enhance the co-operation between Arab universities and support the notion of open communication to facilitate flow of knowledge and information between them.
- Encourage Arab researchers who work in developed countries to contribute in establishing strong scientific and research base in their countries. This could be realised through forming different teams from researchers inside and outside the Arab countries, while TQM approach emphasises work in teams.
- Co-operate with similar advanced research communities e.g. in Europe and US. In addition, working with excellent research communities will reinforce and enhance the quality level of research in the Arab HEIs. Also, gives Arab HEIs good opportunity to benchmark their research activities against such communities to embed the notions of continuous improvement and self-assessment in such activities.

Additionally, Salama (2001) states that Arab HEIs should involve all key stakeholders in decision-making particularly academics, students, and the productive and service sectors, alongside with the representatives of governments. The value of such participation lies in enlightening the visions necessary for decision-making and the formulation of balanced HE policy. HEIs in the Arab countries should be more sensitive to their students' concerns, taking into account their needs in all activities of life during years of study. For example, effective course delivery, encourage them to contribute effectively in teaching and learning process. Also, prepare their students to the working life by provide them with appropriate training and skills. In addition, Arab HEIs should help shape the labour market by identifying the needs of the social and economic sectors

for new professionals and specialists. Accordingly, new disciplines and specialisations could be introduced into the curriculum of such HEIs.

2.2.7 Factors of Adopting TQM in Higher Education

This section will present some factors that may appear when adopting TQM in HEIs. Factors in the context of this section are those barriers, obstacles, or problems associated with TQM adoption in HE. These barriers are drawn from quality in the HE literature and described in the following sections:

2.2.7.1 Students as Customers

Terms used by TQM originally came from business and industry; confusion over the terminology is considered one of the problems encountered adopting TQM in HE (Cruickshank, 2003). Freed and Klugman, (1997) stated, “*Many institutional members, particularly faculty members, were, and are troubled by the business-oriented language associated with quality efforts, especially efforts associated with TQM*”. However, another academic’s opinion says it is important to work through new terminology, since it reflects a new approach, where new rethinking is required (Giertz, 2000). Furthermore Giertz states, “*The difference between the traditional academic quality concept and TQM is not only a question of terminology but reflects a fundamental difference in values*”. The identification of the customer is normally the first step in the design and delivery of quality services using a TQM philosophy. One of the main aspects proposed by TQM in HE is the involvement of a student as a customer. Yet, academics argue that if statement like “the customer is always right” is applied in higher education the needs of society might be contrary with student satisfaction (Unal, 1997). Unal adds that the concept of a student as a customer could be seen differently. For example, students take classes, consume meals, sleep in halls of residence, buy books and use many services for which they pay money. Consequently, student indeed fits the word customer.

However, referring to student as a customer does not necessarily mean they must be given whatever they request (Spanbauer, 1995). Students may request not to do assignments or homework, or they may request not to attend lectures, which conflicts with the learning process. That is why they also have some responsibilities. In this context, Beeson (1998) notes that in the learning process, students should become self-motivated and self-directed learners, and submit their own work. Also, student should stick with the university rules and regulations, and represent his/her institution in a good manner. Where the society is concern, the student must analyse problems of society,

look for solutions to the problems, apply them, and accept social responsibilities (UNESCO, 1998).

The HEI like any organisation produces products and has its own customers. Products and customers of HEI can be classified according to Harvey (1995) using the block diagrams shown in Figures 2.4 and 2.5 respectively. This variety of customers in HE leads to different demands that might affect the behaviour of education systems, and sometimes put the university's products or goals in conflict. Therefore, the HEIs need to find a way in order to balance the demands of such plurality of customers through prioritising the competing needs, while these needs require market values to make right decisions.

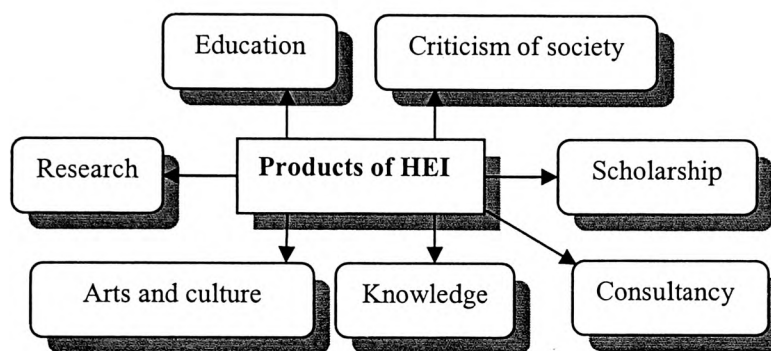


Figure 2.4 The Products of HEI (synthesised from Harvey, 1995)

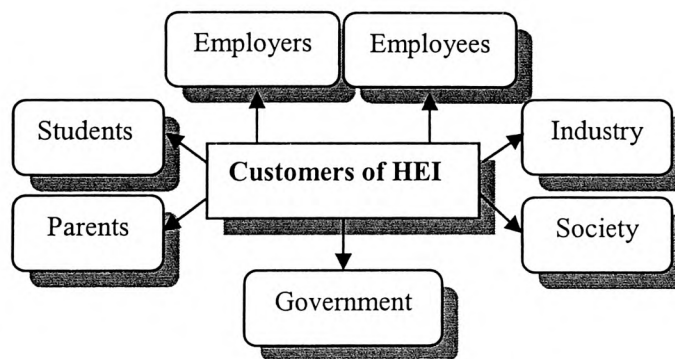


Figure 2.5 The Customers of HEI (synthesised from Harvey, 1995)

Bonvillian and Dennis (1995) point out that in the case of student for example, HEIs must establish a new working relationship with their students, where their rights are to be respected as customers, but does not compromise the academic standards. The customer in the service sectors is less clearly separated from the product compared to manufacturing sectors (Harvey, 1995). Harvey adds that the heterogeneity in customer's requirements and expectations in service sectors leads to a dilemma in defining the

product and in understanding customer's needs. Also, Harvey indicates that customers of service sectors include HE sector should be given additional focus through provide them more involvement and facilitate effective communication links in order to understand their needs more clearly. As a result, this will offer organisations a good opportunity to improve their services and maintain the loyalty of their customers.

2.2.7.2 HEIs Stakeholders

From the literature it is accepted that stakeholders can include stockholders, employees, customers, competitors, suppliers, the community, special interest groups, society, or the public at large, government and the natural environment (Freeman, 1993; Clarkson, 1995). Wheeler and Silianapaa (1997) classified stakeholders as either primary or secondary stakeholders. A primary stakeholder is one who has a direct stake in the organisation and whose continuing support is needed by the organisation for continuing survival (Clarkson, 1995). In addition, examples of primary stakeholder would be stockholders, owners, employees, customers, suppliers and other business partners. The organisation could be seriously damaged or unable to continue operating if any primary stakeholders becomes dissatisfied and withdraws from the system. Secondary stakeholders are groups who influence or affect, or are influenced or affected by the organisation, but they are not engaged in transactions with the organisation and are not essential for its survival (Clarkson, 1995). Examples of secondary stakeholder include government and regulators, community, social pressure groups, and competitors.

However, stakeholders of higher education institutions are divided into different groups that affect the education process, namely: existing and potential students, faculty and staff, employers, government, and parents (Kanji and Tambi, 1999; Karathanos, 1999; Driscoll and Wicks, 1998). Students perform one or all roles of a customer as buyer, user and partners of education; therefore they become important stakeholders of the university (Kanji and Tambi, 1999; Karathanos, 1999). Faculty, staff and administrators are internal stakeholders and become part of the supply chain (Kanji and Tambi, 1999). Government, accrediting bodies, professional societies, parents, community, and society at large are many of the external stakeholders. Many of the external stakeholders provide funding to the university and have a high interest in the functions of the university (Kanji and Tambi, 1999; Karathanos, 1999; Smith and Demichiell, 1996).

Therefore, when narrowing the emphasis on HE there are several areas of importance to stakeholders; graduates satisfaction with placement services, alumni feedback, and

student satisfaction for registration and/or financial aid processes (Mergen *et al*, 2000). Thus, the total quality considers a wide range of beneficiaries or stakeholders, such as society and business and not just the internal customers of the university (Scrabec, 2000).

2.2.7.3 Lack of Understanding

The quality concept in HE is more debatable than in other areas. Due to the new challenges facing HEIs, many institutions are struggling under new circumstances and wondering how they will survive. Accordingly, they direct their attention towards the experience of industry in dealing with quality issues. On the other hand, the understanding of quality in industry and service production is relatively homogenous and well defined, while in HE the perceptions of quality are much more varied (Giertz, 2000). Freed and Klugman (1997) considered that one of the approaches that could address such challenges is a quality continuous improvement approach. Furthermore, because it focuses on decreasing the costs of processes, systems, and in the same time emphasises on quality improvement and stakeholder satisfaction. Understanding about quality improvement in order to fulfil the benefits is essential. The need for understanding is the first obstacle to be overcome, since it is difficult to make any progress when members lack the necessary knowledge required for such a process (Freed and Klugman, 1997). As a result, all HE institution's members need to understand why their institution wants to start a new journey. They have to be familiar with different quality concepts and new quality practices; otherwise they might consider it as a fashion not as a long-term strategy.

2.2.7.4 Costs and Time

TQM tools and techniques are important in analysing the data required for continuous improvement. Many people believe that, this consumes time in the short run, while it may save time in long run (Freed and Klugman, 1997). As a result, they feel that they do not have enough time to achieve quality improvement effectively. In addition, Lewis and Smith (1994) pointed out that time remains a problem with TQM since people viewed TQM as another assignment rather than a strategy that could realise improvements. However, Freed and Klugman added that it is necessary for institutions to have financial resources in order to get the movement off the ground and continuously support quality enhancement efforts. Seymour (1992) comments, "*The University's inability to construct the classrooms is a clear example of service quality gap_ resources constraints that make it difficult to deliver the service as expected*". This

means appropriate infrastructure and resources is required for offering good quality processes.

Kondo (1997) considers a number of opinions concerning quality costs and time, the first one is *"Improving quality is a good thing, but it raises cost, so it needs to be done judiciously"* the second opinion is *"Improving quality takes time and efforts and therefore lowers productivity. It's good to raise quality, but it mustn't be taken too far"*. Nevertheless, organisations that adopt such opinions are those that have never integrated continuous quality improvement as a normal part of doing robust processes. This indicates that executives in such organisations are failing to calculate and understand that the costs are associated with poor quality. Harvey (1995) indicates that quality systems in education are seen as more workload that could be added in addition of administrative loads on teachers who already have enough work to do. This perspective reflects the lack of understanding of the vital role of quality systems that could play in managing and emphasising on crucial aspects such as teamwork, open communication and continuous improvement. TQM is a long-term process; it needs patience, resources and good planning, TQM benefits are not immediately apparent, since three to ten years are required between its initiation and expected benefits (Harvey, 1995).

2.2.7.5 Staff Resistance

The existence of sceptics within any institutions should be considered when implementing TQM. Sceptics are people who do not recognise any important positive outcomes as a result of improvement efforts (Freed and Klugman, 1997). Resistance from the staff results from the effect of a change in status, beliefs, practices, and habits of those affected (Juran, 1989). Harvey (1995) states, *"Nor can this scepticism be ignored because tension between TQM practitioners and non-practitioners in the same institution"*. They fear the unknown, while driving fear out is crucial to overcome its negative impacts on an institution and on employee in particular. Deming (2002) considered that drive out fear is very important, since no one can do a good job if he or she lives in fear of the results. A better way to create confidence between staff is to encourage them and not to apportion blame from the outset of any problem arises. Fear limits staff involvement and the contribution of ideas. One of the challenges facing leadership is to help sceptics to understand quality principles and offer them the opportunity to communicate the value quality initiative (Freed and Klugman, 1997). In addition leadership should explain to them that they are important to the institution, and their contribution is vital, but not to force them to obey.

2.2.7.6 Changing Culture

Culture could be defined as a set of philosophy and values shared by the people in an institution (Martin, 1993). To implement TQM successfully in HEIs, their culture should be changed in order to direct activities towards continuous improvement. In spite of the necessity of cultural change, it is recognised to be difficult to realise, while attitudes and behaviour of the people need to be modified (Gonzalez and Guillen, 2002). Giertz (2000) states, “ *It has been suggested that the stronger the academic culture, the harder the resistance to TQM, and that since the academic culture is stronger in old universities than newer institutions, the resistance will be harder in the former* “. Gonzalez and Guillen (2002) further add that a change in organisational design is one of the suggested approaches to achieve cultural change. However, this approach firstly is slow and very costly; second its affects on behaviour are imprecise and needs long time to be evaluated.

Thus, it is important to find other sources of change, which are accurate, dominant and operational. People can accept new principles if they know that the principles will not only enable them to do better (technical development), but also to be better (human development). Newby (1999) states that “*the nature of the management culture in some institutions, the traditional culture of higher education and the heritage of past quality initiatives*” are the broad cultural barriers to TQM in higher education. This indicates that a major obstacle to TQM in HE are culture issues. Resistance to change might occurs, while people fear new concepts, future, and loss of position. Changing the culture needs time and efforts, since changing people’s attitudes and beliefs in certain organisation is not easy, but is also not impossible.

2.2.7.7 Leadership as a Barrier

The principles of TQM need strong support from the leaders of institutions. Leadership and management commitment is one of the main issues for successfully adopting TQM aspects (Gonzalez and Guillen, 2002). Moreover, Sallis (2002) states, “*It has been estimated that 80 per cent of quality initiatives fail in the first two years. The main reason for failure is lack of senior management backing and commitment*”. Consequently, leadership can be fundamental barrier to the adoption of TQM aspects. Some reasons behind the leaders to become barriers are given below (Freed and Klugman, 1997):

- *When leaders do not carefully understand the philosophy of continuous improvement.*

- *When Staff members become sceptics and do not trust them.*
- *When they are unable to communicate the quality message.*
- *When decisions they made that are apparent to conflict with quality principles.*

Leadership in education plays an important role concerning the empowerment of staff members by supporting and encouraging them to improve the learning of their students Sallis (2002). Moreover, Unal (1997) states that, *“TQM leadership is distributive leadership, and should be throughout all levels of an educational institution, that is from the top to the base of organisational hierarchy. Leadership must make any program attractive and necessary for all employees”*. Furthermore, there is no chance for successful cultural change in institution unless leadership strongly support and work towards change the attitudes of staff members regarding TQM principles. This emphasises the crucial role that leadership can play in the direction of adoption of quality approach include TQM adoption in institutions.

Sections 2.2.7.1-2.2.7.7 concluded and revealed cultural and attitudinal barriers to the application of TQM in HE. A part of the attitudinal barriers may stem from academics' scepticism for management fads, since suspicion and resistance are the most common reaction to new paradigms. Cultural factor has also been given as a potential problem in implementing TQM in HEIs. A further problem adopting TQM to higher education is confusion over the terminology, while the faculty members may find it difficult to treat students as customers. Furthermore, leadership commitment to quality is one of the critical success factors towards successful implementation of TQM in HEIs. Without this commitment the improvement process in HEI cannot be sustained, and could resulted to another barrier regarding the implementation of TQM in such institution. Costs and time could be another problem facing the implementation of TQM in HEIs. Therefore, it is necessary for such institutions to have sufficient financial resources and time for this purpose, while TQM, as a strategic management approach is a long-term process.

2.2.8 TQM Models in Higher Education

This section discusses two main TQM models in HE. These models are the European Foundation for Quality Management (EFQM) Business Excellence Model, and Malcolm Baldrige National Quality Award (MBNQA). The main reason behind choosing such two models was that they were highly adopted and practiced in HEIs in Europe and in the USA respectively. Both models in business (see tables A.7 and A.8 in appendix 1) were discussed in section 2.1.6 (part I).

2.2.8.1 European Foundation for Quality Management (EFQM)

Several countries have developed HEI self-assessment systems and mechanisms, usually composed of initial self-assessment processes that are then complemented with external assessment practices, and applying quality models such as the ISO 9000 standard and EFQM model (Rosa *et al.*, 2001). Tari (2006) points out that the EFQM model shown in figure 2.6 is a generic instrument which can be successfully applied to a HEI as a tool for improvement.

Mora *et al* (2006) mentioned that in the EFQM model, enablers or agents define what organisations do in order to achieve excellence. Specifically, it is to do with activities related to the leadership of the directors, the management of human and material resources, as well as process management. Furthermore, EFQM (2003) states:

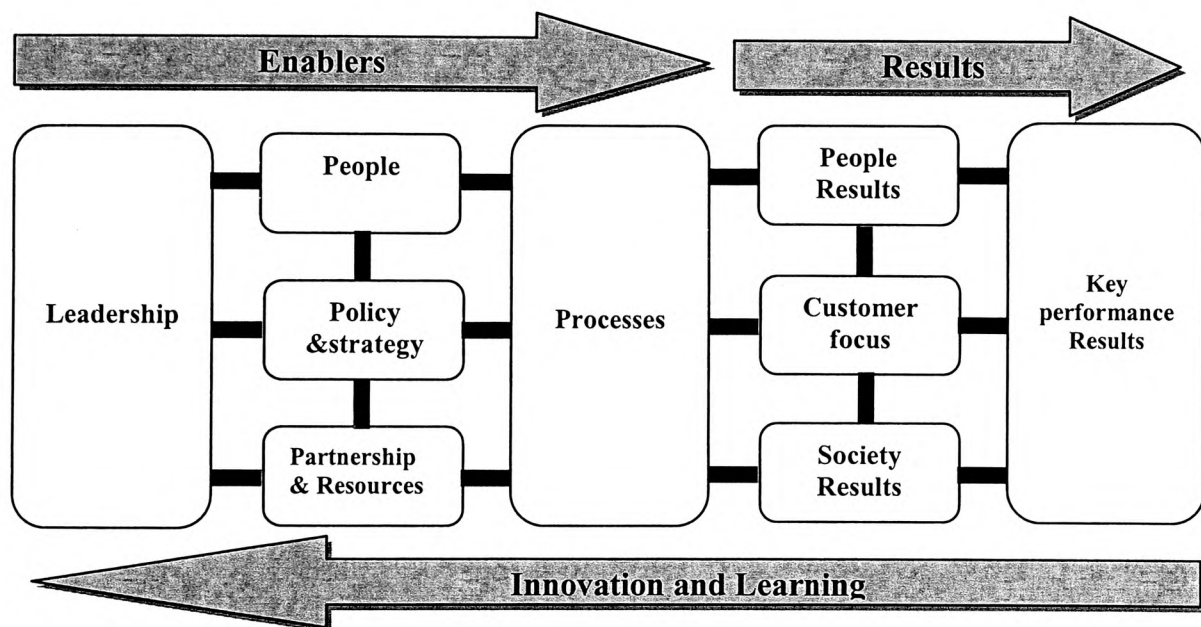


Figure 2.6 EFQM model (source adopted HEFCE, 2005:1)

Leadership: Excellent leaders develop and facilitate the achievement of the mission and vision. They develop organisational values and systems required for sustainable success and implement these via their actions and behaviours.

Policy and strategy: Excellent organisations implement their mission and vision by developing a stakeholder focused strategy that takes account of the market and sector in which it operates. Policies, plans, objectives, and processes are developed and deployed to deliver the strategy.

People management: Excellent organisations manage, develop and release the full potential of their people at an individual, team-based and organisational level. They promote fairness and equality and involve and empower their people. They care for, communicate, reward and recognise, in a way that motivates staff and builds commitment to using their skills and knowledge for the benefit of the organisation.

Partnerships and resources: Excellent organisations plan and manage external partnerships, suppliers and internal resources in order to support policy and strategy and the effective operation of processes. During planning and whilst managing partnerships and resources they balance the current and future needs of the organisation, the community and the environment.

Process management: Excellent organisations design, manage and improve processes in order to fully satisfy, and generate increasing value for, customers and other stakeholders.

Analysing the structure of the relationships in the EFQM model, process management appears to be the link between the other agents and the results (Mora *et al* 2006). However, Zink and Schmidt (1995) pointed out that the key processes of a higher education centre will not be the same as those in other organisations, but once they have been identified, there should be no differences in terms of their management and improvement. Kanji *et al* (1999) considered the key processes are those that have a significant effect on the critical results for a given organisation. In universities, these processes are identified by Zink and Schmidt (1995) and Rosa *et al* (2003) as the processes of administration and service, teaching and learning, and research.

Additionally, Pupius (2000) illustrates how the EFQM model applies in HE context by contextualising the criteria as follows:

Results orientation: The key word is “balancing”. Emphasis would be put not just on academic outcomes or quality assurance results, but on results from student and staff experience surveys on impact on community.

Customer focus: In education, customers would include students, employers, parents, businesses, local, regional and national agencies and research funding bodies. Loyalty would be measured in terms of propensity to recommend the institution.

Leadership and constancy of purpose: This is about ‘walking the talk’ and ‘living the values’. Leaders would be all academic staff who teach students and all administrative managers. The institution would develop a strategic vision and share this all staff and student.

Management by processes and facts: institutions adopting these principles begins to identify, map and model key processes and how they relate to elements of the hierarchy e.g. faculties and departments. Each process would have an identified owner and standards and measurement framework would be set in position.

People development and involvement: trust is an essential for effective process working. Involvement can be structured through improvement teams, review teams, process improvement etc.

Continuous learning, innovation and improvement: the methodology embodies the principle of self-evaluation or self- assessment. The institution would learn from the feedback by reviewing impact of strategies and actions, trends in results, performance against target and by comparing with best-in-class through benchmarking.

Partnership development: this would include partnership and collaboration with partner colleges, business and local organisations.

Public responsibility: for an institution, this would include defining a role within the local community, region or country to enhance the social and economic well-being or the people.

Furthermore, there is awareness among educators around the world that higher education is facing a number of challenges (see section 2.2.3); this leads most European countries to stress quality improvement in their higher education policies (Wiklund *et al.*, 2003). Owing to that, different approaches have been adopted for the introduction of quality management in their universities, such as self-assessment and external assessment of the institutions, accreditation and certification systems, and different models of TQM. One such models is the EFQM model. Regarding this point, HEFCE (2003) stated that *“EFQM model was initially used as a way of recognising achievement, with self-assessment being undertaken by organisations who needed to show continuous improvement over time in order to apply for the European Quality Award”*. The EFQM (2002) cited in Hides *et al* (2004:195) defined self-assessment as *“a comprehensive, systematic and regular review of an organisation’s activities and results referenced against the EFQM Excellence Model”*. Also, it can be seen from section 3.3.8 (chapter 3) that TQM philosophy is emphasising the notion of self-assessment to improve organisation’s performance.

To help organisations with the process of self-assessment, Hides *et al* (2004) pointed out that RADAR logic (see figure A.3 in appendix 1) was introduced and can be seen graphically in RADAR is an acronym for **R**esults, **A**pproach, **D**eployment, **A**ssessment

and Review. In addition, HEFCE (2003) states that the philosophy offered by RADAR embraces the thinking that an organisation need to:

- *Determine the **Results**, it is aiming to achieve once its policies and strategies have been implemented;*
- *Plan and develop an integrated set of sound **Approaches** which will enable the results to be realised;*
- ***Deploy** the approaches in a systematic and comprehensive way throughout the organisation – across its breadth and depth;*
- ***Assess and Review** whether these approaches are effective and have been able to provide the planned results, identifying, prioritising and implementing planned improvements as a result of this analysis.*

It can be seen that applying self-assessment through RADAR logic offers a snapshot where an organisation is. It also gives an organisation a good opportunity to identify and address the vital improvement activities. Grouping such activities will help the prioritisation and allocation of resources. This leads to direct the organisation's efforts and resources effectively and efficiently towards realising its objectives and goals.

2.2.8.2 Malcolm Baldrige National Quality Award (MBNQA)-Education Criteria

The MBNQA (2004) education criteria are built upon the seven categories framework used in the business excellence criteria (see section 2.1.6). The reason for the use of the same framework is that it is adaptable to the requirements of all organisations including HEIs. However, such adaptation did not assume that these requirements are necessarily addressed in the same way. The adaptation to education was largely a translation of the language and basic concepts of business excellence to similarly vital concepts in education excellence. Figure 2.7 shows the core values and concepts of MBNQA-education criteria which are embedded in seven categories. Table A.9 in appendix 1 shows the seven categories and its description, these categories are Leadership, Strategic planning, Student, stakeholders and market focus, Measurement, analysis, and knowledge management, Faculty and staff, Process management, and Organisational performance results.

MBNQA (2004) identifies that MBNQA-HE criteria are designed to help HEIs use an integrated approach to organisational performance management that results in:

- Delivery of ever-improving value to students and stakeholders, contributing to education quality
- Improvement of overall organisational effectiveness and capabilities
- Organisational and personal learning

Also, the criteria are built upon the following set of interrelated core values and concepts:

- *Visionary leadership*
- *Learning-centered education*
- *Organisational and personal learning*
- *Valuing faculty, staff, and partners*
- *Agility*
- *Focus on the future*
- *Managing for innovation*
- *Management by fact*
- *Social responsibility*
- *Focus on results and creating value*
- *Systems perspective*

It can be seen that MBNQA-HE criteria takes into account different organisation's entities and provides effective integrity among them, while the framework established by the criteria encourages accountability, transparent decision-making, and optimal use of available resources (Arif and Smiley, 2004).

According to Hodgetts (1993), three lessons could be learnt from the MBNQA criteria in general. The first one is that there is no best way to achieve world-class quality. However, each Baldrige winner's quality system has been tailored to meet its specific needs. Each has combined technology, management skills, and training and human resources policies to meet customer needs in unique and powerful ways. A second lesson is that the principles of quality management can be applied broadly across organisations. All improvement activities now come under the rubric of "quality". At the same time, the meaning of the term total quality management itself has become very broad and difficult to define. In many ways, quality management is now simply synonymous with good management. The third lesson is that quality is not just a goal that an organisation achieves, but an ongoing quest to accountability improves.

Moreover, MBNQA (2004) pointed out that the scoring system of MBNQA-HE criteria is based on two evaluation dimensions named ***Process*** and ***Results***:

Process: refers to the methods an organisation uses and improves to address the Items requirements in categories 1-6 (see figure 2.7) and (table A.9 in appendix 1). The four factors used evaluate process are called Approach, Deployment, Learning, and Integration (A-D-L-I):

Results: refers to your organisation's *outputs* and *outcomes* in achieving the requirements in category 7. The four factors used to evaluate results are:

- Your current level of performance
- Rate (i.e. slope of trend data) and breadth (i.e. how widely deployed and shared) of your performance improvements

- Your performance relative to appropriate comparisons and/or benchmark
- Linkage of your results measures (often through segmentation) to important student and stakeholders; program offering, and service; market; process; and action plan performance requirements identified in your Organisational Profile and Process Items

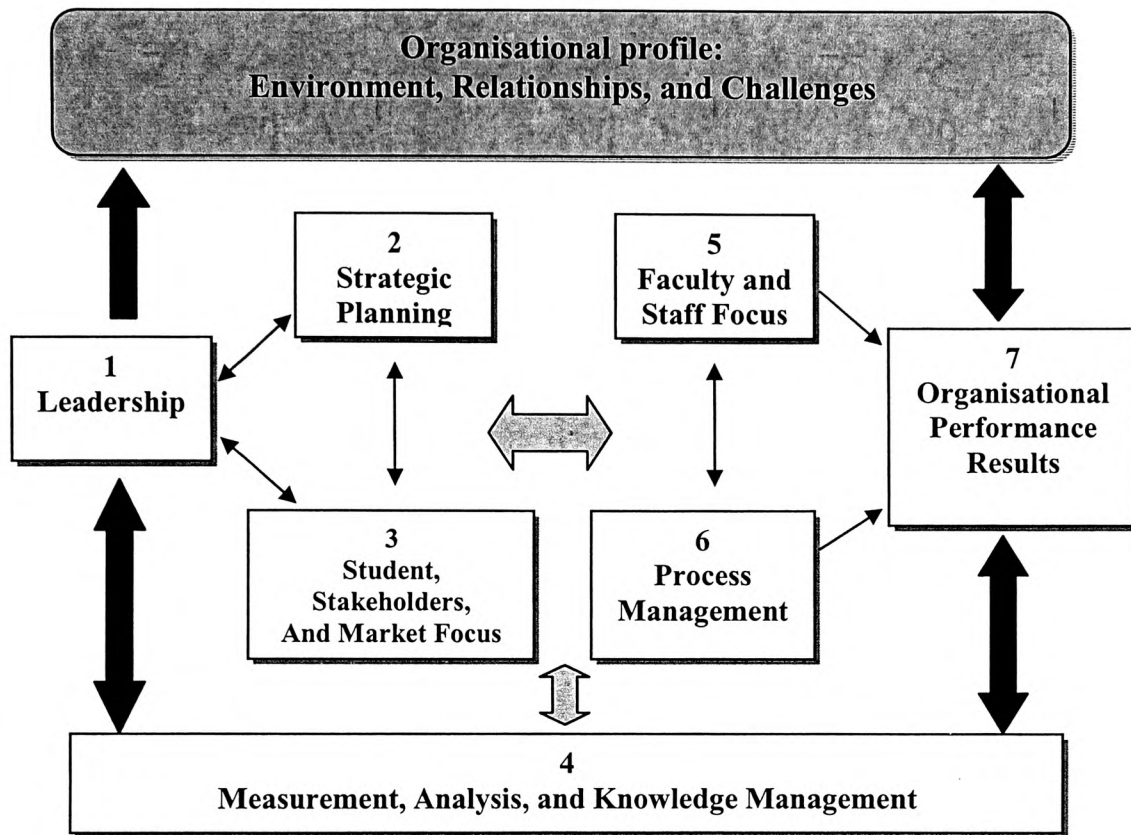


Figure 2.7 MBNQA-HE criteria (source adopted: MBNQA, 2004:5)

MBNQA (2004) mentioned that Baldrige Education Criteria have been used by thousands of US education organisations to improve their performance. Also, the criteria help organisations respond to current challenges include; the need to create value for students, stakeholders, and organisation, openness and transparency in governance and ethics, and the challenges of rapid innovation and capitalising on knowledge assets. Additionally, the criteria can help align resources and approaches, improve communication, productivity, and effectiveness, and achieve strategic goals.

Different models and concepts of TQM, for example EFQM and MBNQA are widely applied to educational institutions. These models embrace the philosophy of TQM which has been modified for the education environment. Many international colleges and universities are realising the benefits of this philosophy, e.g. Virginia Commonwealth, Rochester Institute of Technology, Oregon State, Michigan State,

Leeds Metropolitan University, and universities in Turkey and Malaysia (Grant *et al*, 2004).

2.2.9 Summary of Part II

This part of literature review discussed the TQM philosophy in HE and the related issues. These include the development of the HE concept from teaching and learning only to including research and service processes due to the advancement of knowledge and information technology. Also, the challenges facing HE have been highlighted that comprise e.g. the fast changes encountered with knowledge and technology, meeting the needs of market for high-skill labour, and establish an effective and strong links with industrial and business sectors.

The concept of quality in HE was discussed and concluded that it is an elusive concept, while it has been defined in several ways e.g. quality as fitness for purpose, quality as transformation, and quality as excellence. Moreover, the HE and society day-to-day interaction was offered through the three main activities of HE include; HE and business interaction, teaching and learning, and research activity. Also, the role of quality through TQM approach in improving many issues in each activity has been discussed and concluded vital aspects that could help and enhance educational and service processes provided by HEIs in general and Arab HEIs in particular including Libyan HEIs.

Furthermore, this part presents a review of quality models including EFQM and MBNQA in HE where these two models are highly adopted and practiced in HEIs in Europe and in the USA respectively. The aspects of both models are reflecting the notion of TQM philosophy. Also, both models provide self-assessment mechanism for HEIs that could help them in review and assess their activities and results. In addition, this part gives the researcher a solid foundation and deep understanding of the quality concept and notions in HE. Also, it provides considerable picture and view of different issues that could affect the improvement of quality process in HEIs.

CHAPTER 3

Analytical Framework

3.1 Introduction

The previous chapter presents literature review including TQM theory and TQM in HE where different issues related to this topic were discussed. For example, the concept of quality in general and in HE, TQM models in business and in HE e.g. EFQM and MBNQA, and HE society day-to-day interaction, and. This chapter provides the analytical framework (AFW) which was developed by the research from literature review. The AFW is based on TQM philosophy where a number of key TQM principles are identified. Also, this part will highlight the aspects and concepts of those key TQM principles both in general TQM theory and TQM in HE. The development of the AFW will also play a significant role in the process of selecting the appropriate methodology, which is the case study research strategy. In addition, the function of AFW in this study is to formulate an explicit theory, that could be used to achieve the aim of the research, through the key TQM principles that could enable and affect the quality services and processes. Thus, this research will compare the findings in the case study university with the various themes of the framework based on the literature review.

3.2 Importance of the Framework

Sekaran (2003) defined the Framework as “*a conceptual model of how one theorises or makes logical sense of the relationships among the several factors that have been identified as important to the problem*”. Also, Sekaran (2003) and Fisher (2007) pointed out that the relationship between the literature survey and the framework is that the former provides the raw materials (solid foundation) from which the latter is built or developed (likewise this research). Hussey and Hussey (1997) pointed out that the framework is based on a collection of theories and models from the literature which underpins a positivistic research study. On the other hand, Hussey and Hussey mentioned that in phenomenological study (likewise this research-see chapter 5); a framework may be less important or less clear in its structure. In the same context Easterby-Smith *et al* (1991) indicated that researchers should not be tied by their frameworks. In order to achieve that it is possible to prepare a topic guide which can be used as a loose structure for the questions (Easterby-Smith *et al*, 1991). Additionally, Saunders *et al* (2007) indicate that the framework helps organise and direct data collection and analysis (likewise this research). Fisher (2007) points out that the

framework prepares and helps undertaking the findings out, and it gives a sense of control over the research.

This chapter presents the AFW (see figure 3.1) through a number of themes identified from literature review (chapter 2). Tables A.11.1-A11.10 in appendix 2 illustrate such themes and the key literature of each one. These themes are; leadership, customer focus, teamwork, open communication, education and training, reward and recognition, commitment to quality, measurement, continuous improvement, and empowerment and involvement. Such themes named “key TQM principles”. It should be noted that all themes are considered interrelated and interconnected. Also, themes are not assuming casual links and not assuming ranking (ignoring categorisation). Subsequently, all themes are considered equally in their importance.

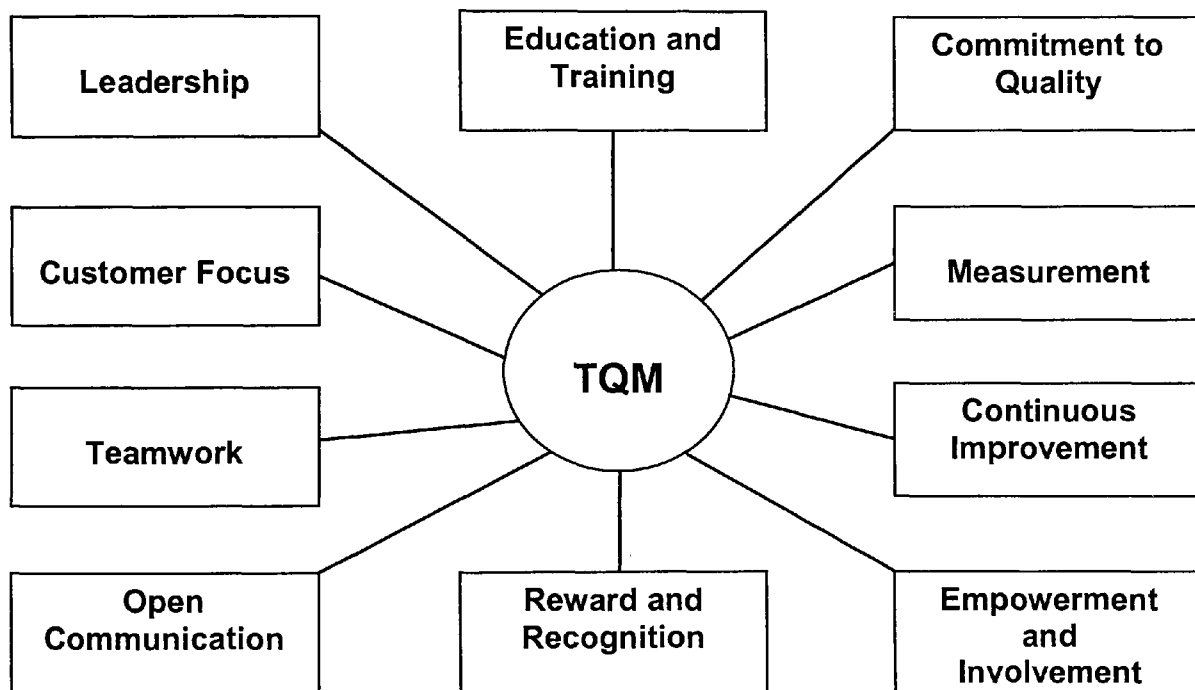


Figure 3.1 Themes of the analytical framework assembled from literature review

Also, the details of aspects and features of such key TQM principles (given in section 3.3 and its associated sub-sections) as AFW themes are based on literature of TQM philosophy. Such aspects have been developed in order to fully utilise existing theory and knowledge within this study. In addition, those aspects and features are contributed in synthesising those key concepts thereby leading to the enhancement of understanding of the phenomenon under analysis. This means that the literature within chapter 2 including the aspects of key TQM principles both in TQM theory and TQM in HE

provided by chapter 3 would help creating, supporting and justifying questions of interview protocol given under each theme (see tables A.11.1-A11.10 in appendix 2). The idea of such interview questions is based on the characteristics of in-depth semi-structured interviews (the main data collection method in this research). These characteristics are given by Mason (2000) in section 5.7.2. Figure 3.2 developed from the key concepts discussed in literature review (figure 3.1) shows the link between the framework and other research activities including; literature review obtained from TQM philosophy, interview protocol, data collection, Libyan context, research findings, and achieving the research aim.

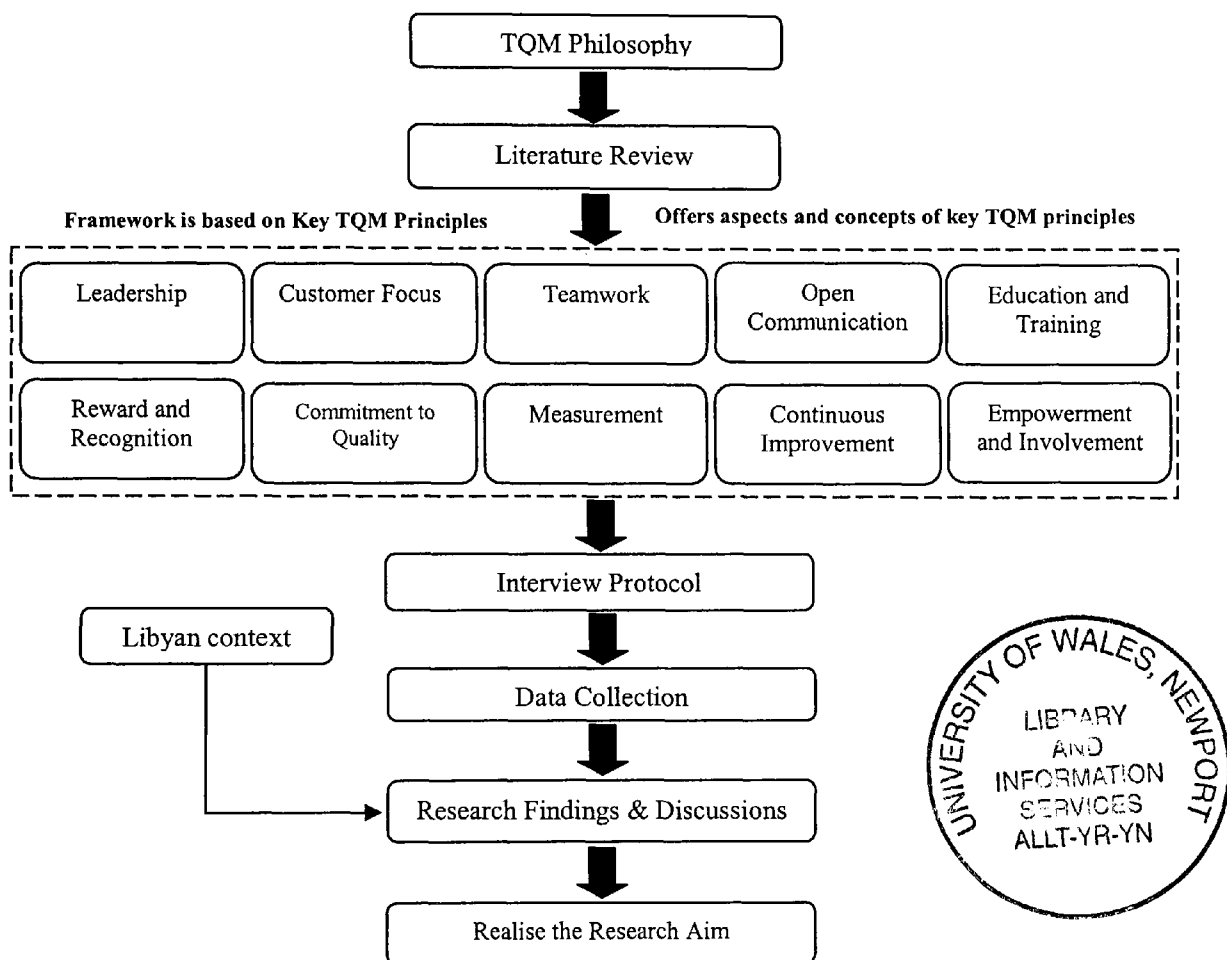


Figure 3.2 Illustrates the link between framework and other stages of the research

3.3 Aspects of Key TQM Principles

As the aim of this research is to investigate issues enabling and affecting the quality of services provided by Libyan public universities: Al-Fateh University as a case study using key principles of TQM philosophy as a framework (as a lens for this purpose). In order to understand deeply the phenomena under investigation, it is important to understand and provide the aspects, concepts, and features of those principles as given

by both TQM theory and TQM in HE. In addition to literature offered by chapter 2, these aspects of key TQM principles will be used to build, create and justify the questions of interview protocol. Also, the information and knowledge provided by such aspects in the following sub-sections will help, support, and enhance understanding the issues under investigation. In addition, such information and knowledge will enable the interpretation and discussion of the research findings (chapter 6) in a consistent way.

3.3.1 Leadership

The critical need for leadership within an organisation is not new. For many years, behavioural scientists have attempted to discover the traits, abilities and behaviours of successful leaders. Leadership means different things to different people. Thus, there is no universal definition of leadership; it could be defined as it applies to different fields include military, industry, education, business and many other fields. Leadership can be considered as an art and science. Anderson *et al* (1994) explain the concept of leadership as: *“The ability of top management to establish, practice, and lead a long-term vision for the firm, driven by changing customer requirements, as opposed to an internal management control role”*. Therefore, leadership is demonstrated by clarity of vision, long-term orientation, contribution to change, employee empowerment, and planning and implementing organisational change.

James (1996) defines leadership as *“An attempt at influencing the activities of followers through the communication process and towards the attainment of some goal or goals”*. Furthermore, Middlehurst (1997) states that leadership could be defined as *“A process of social influence where by a leader or (group of leaders) steers members of a group towards a goal”*. Deming emphasises and recognises the crucial role of leadership in the seventh point (see appendix 1 table A.1) of his fourteen points that summarise his quality approach philosophy (Deming, 2002). Kruger (2001) points out that in relation to this point Deming argue that, the responsibility of leaders is to find out and remove problems and barriers that make it difficult for the worker to take pride in what he does. In addition, it is the responsibility of the leader to help, guide and to coach the worker, however not to work with elements such as pressure and distrust. Unal (1997) points out that one of the keys success factors of TQM is the active leadership that could participate and support everyone in the team. Unal adds that the style of leadership in TQM is a distributive leadership where it should be shared throughout all levels of an organisation, from the top to the base of the organisational hierarchy. The European Quality Award and the Malcolm Baldrige Quality Award (USA) recognise the crucial

role of leadership in creating the goals, values and systems that guide the pursuit of continuous improvement (Zhang, 1997).

Moreover, Kanji in his Business Excellence Model (KBEM) points out the vital role that leadership can play in creating a total quality culture in the following points (Kanji, 2001):

- *To define a mission, vision and goals that promotes a quality culture.*
- *To establish a set of shared values.*
- *To define quality strategy.*
- *To better coordinate the use of resources in order to improve financial performance.*
- *To establish goals and systems to enhance customer satisfaction.*
- *To establish effective information systems and to use objective data in the decision process.*
- *To promote the development of the human resources, investing on training and education and to recognise quality achievements.*
- *To communicate, define and motivate continuous improvement.*

Gonzalez and Guillen (2002) strongly stress on the ethical dimension of leadership. Gonzalez and Guillen stated that the ethical dimension of leadership refers to *“right decisions and actions combined with good intentions, and accomplished by moral correctness of behaviours. This dimension emphasises the intellectual and practical rightness of the leader’s actions in his/her relationship with followers”*. Gonzalez and Guillen added that the ethical dimension becomes necessary for sustaining the leader’s influence. Also, moral behaviour is crucial in influencing the followers; this behaviour includes trustworthiness, fairness, and honesty. In addition, one of the key successes in a TQM is to create an environment where leadership skills of all employees at different levels in the organisation can be brought out and focuses them on continuous improvement.

Additionally, Fletcher (1999) points out that servant leaders should be able to find ways to recognise good performance and motivate their teams. Also, servant leaders serve the servers, inspiring them and enabling them to achieve, viewing themselves as setting a direction and standard of excellence, and giving people the tools and freedom to perform. Fletcher adds that the most important aspect in new quality leadership is senior management’s ability to create and support an empowering atmosphere. In addition, top management is responsible for the culture within the organisation; they must work to improve the existing culture. For a new cultural transition leaders should accept new ideas and philosophies such as TQM.

Moreover, a leader of HEI is a major cornerstone, and the driver for the quality improvement in that HEI, as is the case in any organisation. The senior leaders (university president, VC, etc) should know why he/she is driving the road to quality and clearly identify the institution's customers and stakeholders (Sallis, 2002). Also, the HEI's leader should have a full understanding of the quality concepts, implementation stages, time and resources needed, a clear vision for the future, and the difficulties that may face the university towards realise its quality goals.

Due to the competitive market and the demands of the new global economy, the university leaders worldwide were searching for better ways to manage and improve the quality of HE (Burkhalter, 1996). In addition, the president of the university should play an active role in the quality improvement process. This includes endorse a continuous method for institutional self-examination and improvement. In order to bring all of that to reality Burkhalter adds that leading the total organisation is based on the assumption that everything is changing, while continuous improvement manages the dynamics of that change. Also, the leader of a dynamic team encourages all members to assume more responsibility, communicate more effectively, act creatively, be innovative and work more smartly. In addition, recognition and reward based on performance is a main requirement, and has effective impact on an individual's attitude towards day-to-day improvement processes. Kanji and Tami (1999) in their study "total quality management in UK higher education institutions" found that leadership was rated second in criticality for success, and concluded that leaders should actively help promote, and make decisions on, quality management activities in their institutions.

MBQNA (2004) mentioned that leaders in HEIs need to take part in the development of strategies, systems, and methods for achieving excellence in education, stimulating innovation, and building knowledge and capabilities. In higher education both academics and practitioners, top management's leadership is the key success or failure of implementing TQM (Ferrara, 1999). In addition, leadership attitudes and efforts are also recognised to be the core to realise the necessary cultural change towards TQM approach.

The leaders in higher education should be able to examine the effective and efficient use of resources available to ensure that students have the necessary educational requirements as they accomplish their degrees (Spanbauer, 1995). Also, leaders should be aware that these resources would bring about the change necessary for continuous improvement of educational processes. Moreover, Baker *et al* (1990) formulate six

positions for leader behaviour that strategically increase the probability of follower satisfaction and success:

1. *Recognising and engaging students' desire to learn.*
2. *Increasing the opportunities for quality educational performance and success in college*
3. *Offering positive guidance and direction toward goals through coaching.*
4. *Working to eliminate or at least reduce obstacles to learning.*
5. *Motivating students towards increased satisfaction for development of learning skills.*
6. *Helping to clarify learning goals and empowering students to achieve active learning contingent on effective performance.*

Additionally, instructors play a vital role in the education process (leadership position). However, knowledge is student insight that should be motivated by a teacher; successful instructors understand this concept and perform as leaders to motivate the learner.

In examining the work of more than fifty highly successful college and university leaders, Gilley (1991) identifies five major leadership traits. Together these traits define the prototypical manager. His descriptive characterisations include strategist, opportunist, team-builder, nurturer, and perspectivist. These characterisations are explained as:

- *A strategist views change as a central rather than peripheral force, while a bureaucrat views change as marginal or even threatening to an operation.*
- *The opportunist is always looking for connections, connections between new ideas and organisational strengths and weaknesses.*
- *The team-builder realises co-operation is vital in a knowledge-based enterprise synergy is crucial to the development of ideas.*
- *The nurturer plays an important role by stimulating the production of new ideas.*
- *The perspectivist finds ways to contribute to the community beyond his or her area of primary professional interest.*

Moreover, Jelinek *et al* (1995) state the following primary responsibility of leadership for TQM in higher education:

- *Define where we are and what we look like.*
- *Define where we are doing and how we will move along the road of continual improvement, and disseminate this vision broadly.*
- *Project and demonstrate by example university values that emphasise quality.*
- *Inspire, motivate, and value all personnel in orchestrating concerted action along the road to TQM.*
- *Remove organisational barriers between institutional units and levels of the hierarchy that impede cross-functional teams.*
- *Incorporate learning, problem solving, and risk taking as strong elements of an institutional cultural that seeks TQM.*
- *Celebrate successes – and celebrate them again.*

Jelinek *et al* added that an administrative team (leadership team) must be developed in each higher education institution where the people in this team should possess the knowledge and skills that allow them to inspire in others behaviours. In addition, Spanbauer (1995) points out that the TQM in higher education is able to create mutual supportive environment. Spanbauer adds, teachers and administrative become servant leaders as they provide instructions and required services to students, faculty members and other staff. This style of leadership emphasises the notion of train and coach rather than superior. Additionally, MBNQA (2004) mentioned that senior leaders should serve as example through their ethical behaviour and their personal involvement in planning, communication, coaching and development of future leaders.

3.3.2 Customer Focus

In general, the customer is someone who buys goods or services from an organisation. Customer focus can be defined according to Zhang (1997) as *“The degree to which a firm continuously satisfies customer needs and expectations”*. Zhang adds that the three-quality award models i.e. Deming prize (Japan), European quality award (Europe), and Malcolm Baldrige National quality award (USA) are all emphasise the importance of customer focus in organisations’ processes. Deming (2002) considers that the customer is the most important part of the production line; therefore product should be aimed at the needs of the customer. Customer focus is one of the fundamental concepts of the TQM values, while TQM focusing attention on satisfying the needs of both internal and external customers (BS 7850, 1992).

Furthermore, Deming considers that the customer focus is ignored or is a weakness for an organisation due to a number of reasons (Walton, 1985). First, many managers believe they know what the customer wants more than the customers knows. Second, the relationship between customer and supplier has traditionally been a stressed relationship. Third, organisations should accept customers’ negative feedbacks as well as they accept their inputs, while most organisations do not dealing with criticism and negative feedback. Fourth, most of organisations do not have a great deal of experience dealing with customer needs and desires. Fifth, most firms have never fully believed the old saying that the customer is always right. Sixth, a majority of firms have many customers and it difficult to listen to each of their often competing needs. Finally, some organisations find difficulty to identify and determine the customers. However, Deming (2002) thinks that the main use of consumer research is to learn from the customer. Consumer reactions should be put back into the design of the product, so that executives

can anticipate changing demands and requirements, and set economical production levels.

However, increasing in the complexity of the customer requirements and the pressure of global competition leads to push organisations towards using the total expertise of its different units, in order to be able to solve particular quality problems (Kruger, 2001). This indicates that organisations should be aware of rapid and dramatic changes in customer requirements and should also be able to take an appropriate action to keep continually satisfying and retaining their customers. In addition, an effective continuous improvement program is a vital approach that could be capable to cope with such issues. Thiagarajan and Zairi (1997) point out that one of the success indicators of organisations is their ability to align their corporate strategies to their customers' requirements. However, misunderstanding of customer expectations may lead to spending far too much money on sprucing up the appearance of a company's physical facilities when customer may be much more concerned with how convenient, comfortable, and functional the facilities are.

Additionally, the customers of education gain knowledge, skills and receive services. In addition to the notion of students as customers given in section 2.2.7.1, this section may refer to other writers who have considered and defined the concept of customer in education. For example, Newby (1999) points out that students are the direct customers of universities' educational services. Also, employers and other institutions that employ graduates are indirect customers of universities. In addition, Saunders and Walker (1991) stated *"the students are the obvious recipients, but often are strongly influenced in their choice by their parents or teachers. Other customers include the prospective employers of graduates who want to know that future employees will have relevant knowledge and skills"*. Spanbauer (1995) considers that customers of education can be classified in to two types:

1. External customers include; students, employers, the community at large, taxpayers, other educators from different institutions.
2. Internal customers include other instructors, service department staff.

Randall (2001) indicates that HEIs could have new customers include families whose children are the first generation to go to universities, employers recruiting in the graduate labour market for the first time. Furthermore, Spanbauer (1995) states

"Students are the primary customers, but the customer relationship is somewhat different from a customer in hotel or restaurant. Students may not know what they need to learn. That is where the professional educator comes in. The teacher can observe the want

and needs of students, then balance those with the needs of other customers who may also have a stake in the education programme and the future graduates. These include employers who hire graduates and other educators who may later provide advanced instruction”.

Yet, referring students as customers does not necessarily mean they must be given whatever they ask for. Venkatraman (2007) mentions that HEIs should believe in preparing their students for a future of dynamic changes, with relevant knowledge and life long skills. Also, HEIs should listen to their internal and external stakeholders through a feedback and use it to improve leadership effectiveness. Venkatraman adds, HEIs should be able to determine the needs and expectations of their students and other stakeholders. This could be achieved by e.g. student and industry satisfaction surveys, students’ forums, dialogue sessions and through evaluation of teaching and learning effectiveness.

In the light of the above, MBNQA (2004) stresses the satisfaction of faculty and staff, students, and stakeholders (see appendix 1 table A.9). There are three important types of requirements in determining students’ and stakeholders’ satisfaction. The first is gathering information on student and stakeholders including any important differences in approaches for different student segments and stakeholders groups. The second is following up with student and key stakeholders regarding services and recent interactions to determine satisfaction and to resolve problems quickly. The third is comparing the satisfaction of student and stakeholders to the satisfaction of these groups with competitors and organisations delivering similar educational services and to benchmarks.

Also, MBNQA (2004) education criteria highlights faculty and staff satisfaction, where HEI should offer safety and health environment for its staff in addition to provide opportunities to contribute to their well-being, motivation, compensation and career development. Therefore, HEIs should consider and focus on satisfaction of their internal and external customers; such consideration and focus could be enhanced and supported by further understanding of their needs through their opinions and perspectives e.g. by interviews, focus group and survey.

3.3.3 Teamwork

The concept of teamwork in the TQM literature has been used to describe the mutual activity of individuals (Shapiro, 1995). Besterfield *et al* (2003) defines a team as “*A group of people working together to achieve common objectives or goals*”. If this group

is given a focus or a common cause and are able to produce a leader, the group then become a creative team (Oakland and Morris, 1997). Hardesky (1995) considers that the teamwork is a critical part of TQM. Martin (1993) states *“The team focus of TQM should be appealing to many human service professionals, because co-operation replaces competition as the interpersonal value to be maximised”*. In addition, Oakland (1993) points out that teamwork is a vital component in the implementation of TQM since it builds up trust, improves open communication and develops independence.

Moreover, TQM relies on the interdependence of different parts of the organisation and teams play a crucial role in effecting such interdependence (Curry and Kadasah, 2002). However, Freed and Klugman (1997) pointed out that committees, working in groups or task forces are common for most institutions, but working in teams is not. Table 3.1 shows the difference between committees and teamwork.

Table 3.1 Difference between committees and teamwork (synthesised from Freed and Klugman (1997))

Committees	Teamwork
Committee consists of several members who usually do not know each other well enough to know what skills members possess.	All members share the responsibility for the assigned task.
Committees do not feel the sense of shared responsibility, and therefore, do not take much ownership in the subject.	Members take more ownership in the subject, and they rely on the skills of everyone to accomplish the task.
Members are typically chosen by their peers, and they may not be the most appropriate members for improving the process	Members are usually selected because of their knowledge and interest in the project or process.
Members know that other committee members will be elected, even if they do not finish the assigned task.	Members know that they are working as a team until they finish their task.

Although, committee could function as a team if members are elected properly and possess skills and knowledge that used in integrated way towards achieving the goal. Also, if committee members are able co-operate and not to compete to each other through effective communication. Jabnoun (2001) indicates that companies embracing the team concept had better communication and superior learning environment. BS 7850 (1992) considers that teamwork plays an important role in removing organisational and personal barriers that might interfere with effectiveness, efficiency and continuous improvement of processes. In addition, Kanji (2001) and Spanbauer (1995) point out that teams are able to review processes and solve cross-functional problems effectively. Also, teams work as platform for change and able to bring people together to improve communication. Deming (2002) emphasises that teamwork is a crucial constituent in the TQM approach where all staff areas should work closely

together and not compete with each other. In addition, nowadays organisations are using and operating many complex processes, so one person cannot cope with all necessary knowledge needed to deal with such processes (Besterfield *et al*, 2003; Deming, 2002; Mehra *et al*, 2001). This emphasises the necessity to use total expertise from all the organisation's different departments to solve a particular problems.

Furthermore, teamwork and group decision-making offer several advantages over individual effort. Hackman and Wageman (1995) indicated that teamwork members often evaluate each other's thinking, thus the team has an opportunity to avoid major errors. Anderson *et al* (1994) suggests that internal co-operation among employees enables higher individual performance by creating mutually beneficial situations among organisational members and the firm as a whole. Oakland (1997) states, *"team's recommendations are more likely to be implemented than individual suggestions as the quality of decision-making from good co-operation is high"*. In addition, Lewis and Smith (1994) state, *"The central role of the team, and the need for such team skills as co-operation, interpersonal communication, cross-training, and group decision-making, is a fundamental shift in how work within colleges and universities"*. Thus teams in HEIs should possess such skills in order to support quality initiatives, improve processes, and make right decisions. Deming (2002) highlights the importance of using functional teams to identify and solve quality problems. Furthermore, cross-functional quality teams are among the most common features of TQM firms (Hackman and Wageman, 1995; Ishikawa, 1989). In addition, cross-functional team is a team of six to ten members represent different functional areas in the organisation e.g. engineering, marketing, accounting and human resources.

Cornesky and McCool (1992) point out that the work in institutions of higher education and other service organisations is accomplished across, not within organisational boundaries. However, hierarchy is needed within all organisations to prevent chaos. Seymour (1992) indicates that in HEI if a lecturer talks to a lecturer, a technician to a technician, an administrator to an administrator, and a student to a student, how can the quality issues improve in the institution with these kinds of barriers. On the other hand, Seymour adds that building cross-functional relationships are vital in HEIs, also having cross-functional teams to suggest more effective ideas for preventing problems and new ways of simplifying systems. Cross-functional teams are required in HEIs while they help in breakdown of subcultures usually presented in such institutions (Spanbauer, 1995). For example, when South Bank University adopted TQM, teamwork and cross-

functional co-operation were seen as a key part of encouraging transformational change and increasing the motivation of staff (Chadwick, 1995). In addition, cross-functional teams able to create a co-operative environment, which is required on the campus as teamwork from teachers, executives, department chairs and other stakeholders where problems could be identified, analysed and solved. Chadwick further adds that in classrooms, laboratories, and lectures halls the same problem-solving techniques are skilled to students who are encouraged to work in teams and learn from each other.

Moreover, Jabnoun (2001) points out that the cross-layered teams are the teams that include people from different layers of organisational hierarchies. The objective of these teams is to solve problems and develop new ideas. Jabnoun considers that “*cross-layers teams reduce status differentiation and combine the conceptual skills of top managers, skills of middle managers and the technical skills of lower managers and technicians*”. Jabnoun adds that cross-layered teams are common in academic organisations where status differentiation is limited. This encourages easy establishment of effective teams in HEIs, however the application of teamwork has often been limited to curriculum and management functions (Sallis, 2002). Sallis further adds that, to build an effective TQM culture in HEIs, teamwork needs to be used in a wide range of decision-making and problem-solving situations. Also, it must exist at all levels and across all functions and should include both academic and support staff.

3.3.4 Open Communication

It is hard to imagine a world without communication. Oxford advanced learner's dictionary (1995) defines communication as “*The activity or process of expressing ideas and feeling or of giving people information*”. However, communication can effectively influence people's attitudes and behaviour; media and advertising is a good example for such influence (Oakland, 2000). Direct and open communication among members of an institution has a vital role to play in understanding clearly the principles and notions of quality (Freed and Klugman, 1997). Also, by an effective open communication the organisational barriers could be overcome in order to enhance the work of different entities in organisation towards realise quality goals. Therefore, communication should be carried out at all levels and no one should feel isolation. Deming in the ninth point of his total quality approach (see table A.1 in appendix 1) emphasises that barriers between staff areas should be removed in order to facilitate the flow of information and provide an effective open communication (Deming, 2002). On the other hand, Deming considers that information in traditional management is not

exchanged openly for the best of the company but is considered to be the only property of one department.

Feigenbaum, (1991) and Besterfield *et al* (2003) consider feedback from all levels in organisation is important to realise effective open communication process. This feedback will allow top management to be familiar with all aspects of organisational processes. Thus, leaders become more confident to build their decisions on facts. Besterfield *et al* (2003) indicate that managers should listen to the feedback comes from employees and discuss with them the ideas and how problems could be solved.

However, King, (1991) stated the characteristics of a poor communication climate include the following (cited in Goetsch and Davis, 2003, pp 372):

- *Communication with peers and employees as a little as possible, while, at the same time, being secretive and mysterious.*
- *Being vague and obscure; speaking in generalities.*
- *Communicating with only a select few individuals.*
- *Limiting employee access.*
- *Communicating only when it is personally advantageous to do so.*
- *Ignoring the good ideas of employees.*

Consequently, employees may give priorities, which have little or no relevant to organisational focus due to unclear and inconsistent communication. Therefore effective communication is vital in aligning all employees' efforts to achieve quality processes and goals. Jabnoun (2001) points out that open communication is critical for the required change towards quality culture. However, he adds that lack of trust, and extra sensitivity to others feelings are obstacles to openness and should not be an excuse for not communicating. Wells (1997) states "*Only through good communication establishing an atmosphere of trust, and having a clear shared understanding of the objective can the fear be reduced if not eliminated*". Fear is obstacle to achieve good quality level, driving fear out is important (Deming, 2002).

Many techniques could be used to communicate others (Thiagarajan and Zairi, 1997). Those techniques are seminars, personal communication, posters, departmental meetings, newsletters, notice boards and Internet. However, there is no real substitute for direct contact i.e. two-way communication (mutual communication) (Thiagarajan and Zairi 1997; James, 1996; Besterfield *et al*, 2003; Freed and Klugman, 1997). Lewis and Smith (1994) state "*The communication process must allow people to criticise the vision and be given appropriate responses to their criticisms*". In addition, effective communication builds a wider and stronger relationship with the members of

organisation. In the light of the above, communication skills are important to be possessed by managers and leaders in order to lead their organisations effectively.

In academic environment, Srikanthan and Dalrymple (2004) pointed out that high performance concept stresses the involvement and active engagement of academics with the rest of the university community in policy formation through discussion, arguments and open communication. In addition, in a university, communication flows vertically (top-down) with very few feedbacks loops or horizontal linkage. Srikanthan and Dalrymple further suggested that universities should be moved towards a flatter, better networked, decentralised governance structure, this will lead university to become a network organisation rather than a hierarchical one. In this case there will be more opportunity for different units in a network organisation to communicate effectively and create many links between them. Also enrich a shared understanding, which is helpful to the development of a communal awareness.

However, Seymour (1992) points out that the HEIs find difficulty to communicate effectively their quality stories and efforts of improving quality with e.g. public sectors. Seymour indicates that communicating your quality improvement efforts is a two-way exercise that involves both listening and telling and is a chance to create real understanding and trust. Also, learning about quality improvement terms and concepts allows members to communicate effectively. Freed and Klugman (1997) mentioned that members of HEIs should share information with others and stress the value of feedback. Therefore, effective open communication becomes a strategic necessity rather than interesting option.

3.3.5 Education and Training

Adoption of any new strategy or approach e.g. continuous quality improvement approach is most likely associated with change. Accordingly, any change programme needs proper education and training of those who would be involved in this new strategy or approach. Seymour (1992) points out that people need to be trained in a way that enables them to react to new situations. Also, education and training emphasises changing members' beliefs, behaviour, and attitudes. Seymour adds, education and training also provide people with the required skills that help them do things right in the first place. There is an agreement among the quality gurus; Deming, Juran, Crosby, Feigenbaum, and Ishikawa on the importance of employee education and training (Zhang, 1997).

Additionally, BS 7850 (1992) indicated that education and training programmes should be reviewed for consistency with quality principles and practices. In addition, the effectiveness of education and training should be regularly assessed. On the other hand, Lewis and Smith (1994) pointed out that one of the most frequent reasons for failed improving quality efforts is that many managers are unable to carry out their responsibility because they have not been trained in how to improve the quality systems. Point 13 in Deming quality approach (see table A.1 in appendix 1) highlighted the importance of education: 'Encourage education and self-improvement for everyone'. Deming adds that shortage exists at the high level of knowledge not in good people, and this is true in every field. Furthermore, Oakland (2000) points out that the effective training programmes are those who take in consideration the need of all organisation's members at all levels.

HEI's success depends increasingly on the diverse knowledge, skills, creativity, and motivation of all its faculty, staff, and partners (MBQNA, 2004). Also, the MBQNA criteria emphasise the importance of organisational and personal learning. Organisational learning includes both continuous improvement of existing approaches and adaptation to change, leading to new goals and/or approaches. In addition, organisations invest in personal learning through education, training, and other opportunities e.g. job rotation and increased pay for demonstrated knowledge and skills for continuing growth. This means that learning becomes more adaptive, flexible, and responsive to the needs of students, stakeholders, and the market, also gives faculty and staff satisfaction and motivation to excel.

Moreover, Venkatraman (2007) points out that HEIs should offer training programmes to their staff taking into consideration aligning such programmes with institution's objectives. Osseo-Asare and Longbottom (2002) in their empirical study showed the status of TQM in a UK HEI using the self-assessment methodology developed by the European Foundation for quality Management (EFQM). They emphasise the need of education and training of top management (e.g. deans, assistant deans, head of department, quality managers) and other personnel involved when adopting quality programme e.g. TQM programmes in the HEI. Education and training in TQM programme will help top management and staff understanding the terminology involved and to increases their involvement and commitment towards the quality programme.

In this perspective Spanbauer (1995) points out that administrators and staff need to be educated in how to be more efficient in their respective positions. Also, they need

training in TQM concepts, tools and techniques to assist them in knowing their roles and responsibilities in this quest for continuous improvement. Moreover, Spanbauer (1995) considers education and training in TQM programs should be directly related to the professional development needs of every individual from the president of the university to the lowest personnel level on campus. In this context, Spanbauer suggests a model named ‘individualised professional development plan for a TQM organisation’ (figure 3.3). As illustrated in the model given in figure 3.3 the ideal individualised plan consists of four components:

1. **Academic/technical upgrading:** this part focus on each person needs to be academically and technically competent in his/her specialty (teaching, managing, service, and technical).
2. **TQM training:** this part provides education in TQM concepts, languages and technical skills.
3. **TQM speciality programme:** it supports individuals to focus on institutional commitment and, participates and emphasise on TQM application at each personnel level (teaching, administrative, service).
4. **Enrichment and family development programmes:** organisations became aware that individual, physical, emotional and family relationships have an important role to play in the well being of the institution.

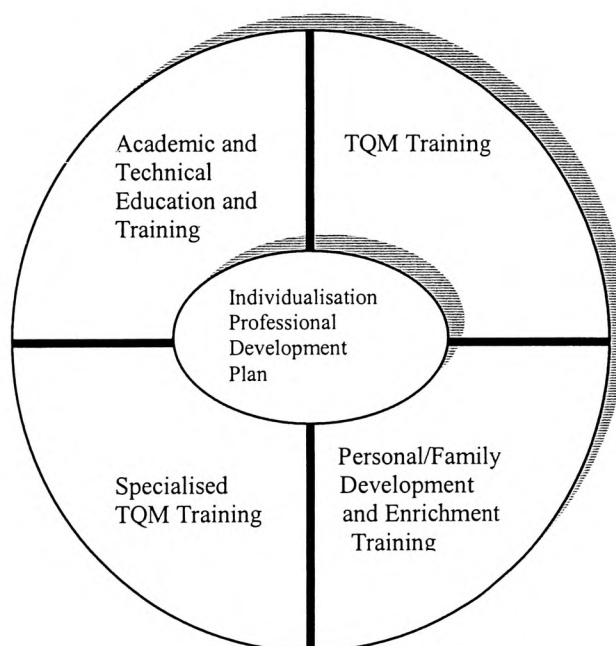


Figure 3.3 An individualised professional development plan for a TQM organisation (source adopted Spanbauer, 1995:528).

Additionally, education and training needs might vary greatly; these needs might include gaining knowledge about assessment practices, learning styles, and effective methods for working with students from different cultures (MBQNA, 2004). Also, education and training needs might include skills in knowledge sharing, communication,

interpreting and using data, using new technology, process analysis, and evaluating and understanding student behaviour and character development.

Therefore, education and training could be considered as key feature when adopting any quality programme and change towards improvement. This could be in any organisation include HEIs, while the aim of education and training is to improve systems and processes by building an environment where faculty and staff examine customer needs and do their job in the most efficient way possible.

3.3.6 Reward and Recognition

Reward and recognition system plays an important role in motivating people either individually or in teams towards realising organisation's objectives (Besterfield *et al*, 2003). Juran and Gryna (1993) define both reward and recognition as following: *Reward* defined as benefits, such as increased salary, bonuses and promotion, which are conferred for generally superior performance with respect to goals. *Recognition* is a public acknowledgment of superior performance of specific activities. In addition, the reward may be delayed until an appropriate time, while the recognition should be on a timely basis. Freed and Klugman (1998) mentioned that continuous improvement process is based on changing of members' behaviours and attitudes, effective reward and recognition system could facilitates and even accelerates these changes. On the other hand, Juran (1989) indicates that Traditional reward systems have provided rewards for meeting quality standards but not for quality improvement. However, the effective reward system should consider performance on quality improvement. Crosby (1979) considers recognition is vital and essential component of any quality improvement program, employees will be more satisfied if their efforts can be rewarded and recognised.

Armstrong (1999) points out that from the employees' point of view the reward system should meet their expectation that they will be treated equitably, fairly and consistently in relation to the work they do and their contribution. Additionally, Shaw (1999) mentions that reward system should attract and retain the talent an organisation needs, and encourage employees to develop the skills and abilities they need. Also, the system should motivate members to perform effectively and support the culture, the company seek to create. Brown *et al* (1994) pointed out that the reward system should be strongly links quality work with pay. Effective recognition and reward systems can make employees more commitment to their jobs and make their jobs more enjoyable. Mehra *et al* (2001) highlight that reward system in a TQM approach is a team-based, this does

not mean that employees are no longer rewarded as individuals. Mehra *et al* added that effective reward and recognition systems should constantly acknowledge the new values. This means such systems should be dynamic and changes due to the circumstances and organisation's needs.

In academic environment, Badri and Abdulla (2004) mentioned that the subject of reward and recognition at colleges and universities is a challenging and controversial one. Badri and Abdulla added that faculty members believe that the process of linking academic awards and recognition, and performance is still less than satisfactory. Badri and Abdulla further added that offering awards in HEIs can be complex, multi-faceted, judgmental process, and needs the participation of committee members in most cases.

Moreover, Dearing (1997) points out that under the dramatic changes encountered with new era, rewards offered to the staff in HEIs must be sufficient to recruit, retain, and motivate them of the required quality. In the light of encouraging and rewarding staff as recognition of excellent performance, a policy adopted by University of Bournemouth is to *"move away from pay systems based on an automatic form of incremental progression to ones which are linked to achievement based on an assessment against a number of criteria"* (HEFCE, 2002d). In addition, it is right for those who teach excellently well either on the individual level or on the institutions level should be rewarded (BRITHISH GOVERNMENT WHITE PAPER, 2003). Also, their excellence should be made visible and celebrated, this will help students make choices and drive cultural change in the value attached to good teaching in HE.

Earn the money is one of the strongest reasons behind the motivation of the people to work hard. If the jobs do not provide adequate income, and regardless of their job satisfaction people will seek other jobs that can satisfy them from money point of view (Cherrington, 1995). Therefore, money can be a powerful motivator while pay is based on performance. Also, pay or any other rewards must be related to effort, skill, experience and other inputs for a state of equity to exist. Hence, it is important to note that recognition and reward system should be base on equity.

3.3.7 Commitment to Quality

The simple definition of commitment is *"The state of giving a lot of your time and attention to something because you believe it is right or important"* (Oxford wordpower dictionary, 1999). Also, the commitment is the willingness to work hard and give your energy and time to a job or an activity.

Feigenbaum (1991), BS 7850 (1992), Motwani (2001), Curry and Kadasah (2002), and Hansson and Klefsjo (2003) consider top management commitment is one of essential components of adopting quality programme which include employee participation, supplier quality management, information system, evaluation, communication, and use of statistical technology. Commitment from the leadership is an essential ingredient for continuous improvement success and creation of quality culture (Scarnati and Scarnati, 2002; Kanji, 2001; Gordon, 2002). Commitment to continuous improvement can ensure that people will never stop learning (Ishikawa, 1985). In addition, Ang (2002) points out that in order to develop employees and make them more valuable, organisation should make a long-term commitment. This means that the organisation should carry its responsibility and commitment towards developing the skills of its employees. Also, it should arrange the work so that the employees' personal goals and those of the organisation are supporting each other.

Crosby (1979) considers that mistakes are caused by two reasons; first one is the lack of knowledge and second is the lack of attention. The first reason could be eliminated by education and training, while the second one could be eliminated by a personal commitment to excellence (zero defects) and attention to detail. Martin (1993) mentions that nothing sends a stronger message to an organisation at large than when employees see top managers actually practicing what they preach. This indicates that employees like to see their managers demonstrating commitment to quality rather than only speaking to the others about it. This simply means leaders should provide good examples. Freed and Klugman (1997) indicated that once people understand quality principles and practices, they are personally committed to seeking out improvements to make. Additionally, Spanbauer (1995) points out that the major changes will not happen quickly and no expected improvement in the results until people are trained well in the concepts, tools and techniques of quality. Therefore, the lack of necessary knowledge required for understanding quality principles and practices could lead to lack in commitment by employees to quality program.

Likewise in academic context, Kanji and Tambi (1999) point out that top-management commitment is one of critical success factors towards adopting continues quality improvement in HEIs besides training and good information. Lewis and Smith (1994) indicated a number of steps that HEIs should follow in order to assume a real commitment to continue quality improvement. For example, establish internal measures for quality and excellence in specific and identified areas, form quality progress teams,

and report, recognise, and reward success. Lewis and Smith added that the HEI's vision should express its commitment towards continuous improvement. For example, the vision statement of Oregon State University represents a process of shared creativity. It identifies the desired development of the students and commitment of the faculty. The vision also addresses a commitment to meeting the needs of the clients and empowering the employees towards continuous improvement within teams. Barnett (1992) points out that organisations should also demonstrate their responsibilities and commitment towards creating and offers training programmes to fulfil the needs and develop the skills of their employees at all levels.

3.3.8 Measurement

TQM philosophy involves the belief that measurement is a very significant process in order to know if an organisation is functioning effectively and competently. Table A.10 in appendix 1 illustrates TQM measurement system versus traditional measurement system. The concept of measurement simply could be described according to Seymour (1992) as measurement is a way of generating friendly facts. Additionally, Schalkwyk (1998) points out that performance measurement system is a mean of gathering data to support and co-ordinate the process of making decisions and taking actions throughout the organisation. Kanji (2001) points out that evaluation and measuring organisation's processes will give an opportunity to choose among different improvement initiatives and assess the effectiveness of quality efforts. Also, it helps to compare the current performance with past performance and with that of competitors and best in practice organisations. Oakland, (2002), Oakland (1993) and Besterfield *et al*, (2003) emphasise in the light of never-ending improvement, that there are various reasons why organisations need measurement; these include:

- a. Highlighting quality problems and, Identifying and determining opportunities for which processes need to be improved.
- b. Indicate process gains and losses.
- c. Providing feedback for driving the improvement effort.
- d. Provide information to make informed decisions

However, produce irrelevant information, track performance in single isolated dimension, and ignoring customer prespective, these factors could lead to hamper improvement efforts (Oakland, 2002). On the other hand, solution to a problem should be based on related data and appropriate analysis of the situation in order to build decisions on facts (Goetsch and Davis, 2003; Dale, 1999). Data analyses should be part of both determining customer needs and improving processes (Oakland, 2002; Mehra *et*

al, (2001). On the other hand, Freed and Klugman (1997) indicated that misunderstanding from the people about the purpose of measurement and its benefits lead them to feel fear from collecting data and considered it for accounting rather than for improving processes and making right decisions.

Quality tools and techniques could help effectively in collecting and analysing data needed by improvement process (Goetsch and Davis, 2003; James, 1996). BS 7850 (1992) and Mehra *et al* (2001) emphasise that all members of the organisation should be trained in applying quality tools and techniques in order to solve problems and improve the work processes. Additionally, quality audit is another independent and systematic way for evaluating organisation's processes (BS EN ISO 9000: 2000). Mehra *et al* (2001) indicated that quality audit is a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements. Also, examine whether these arrangements are implemented effectively and are suitable to achieve objectives. Moreover, self-assessment process is another way of assessing and evaluating organisation's activities. BS EN ISO 9000:2000 indicates that self-assessment is a comprehensive and systematic review of the organisation's activities against a quality management system or a model of excellence. Staff members should be trained to make self-assessment against excellent model valuable and effective (Thiagarajan and Zairi (1997; Oakland, 1993). In addition, self-assessment process enables managers and the whole organisation to find and monitor determined quality problems, and allocate resources to develop quality.

Likewise many writers include Geddes (1993), and Owlia and Aspinwall (1996) emphasise the importance of measuring the processes and activities provided by HEIs. They added that measurement can then provide input for establishing root cause analysis, identifying sources of defects and process trends. Additionally, inspection is still widely used as an assessment process where the performance could be measured and evaluated against a certain criteria (Sallis, 2002). Also, Harman and Meek (2000) point out that quality assurance (QA) is another way of evaluating HEIs processes and activities. Harman and Meek added that QA is a systematic management and assessment procedures adopted by a HEI to monitor performance and to ensure achievement of quality outputs or/and improved quality. TQM philosophy emphasises self-assessment process rather than inspection. Benchmarking as a process for self-assessment is a technique that can be used by HEIs to compare their services, processes, and results with excellent peers (Jackson, 2001). This will help to identify their comparative strengths and weaknesses as a basis for self-improvement. Also, enable

HEIs to learn from each other by looking at why there are different in performance outcomes.

Assessing students' performance is another issue in HEIs. Exams for example can be seen essentially an inspection based approach. Race (1995) points out that traditional exams still widely used as a method of assess students in HE, regardless of growing concern about its validity and fairness. Using such exams gives equal opportunity to all students and it is easier to be sure that the work was done by the candidates, and not by other people. However, using traditional exams, students get little or no feedback, and it measures how good students are at answering exam questions, rather than how well they have learned (Race, 1995). On the other hand, the greater the variety in the methods of assessment, the fairer assessment is to students. Robert (1997) considers that student self-assessment is one of the more useful forms of assessment. Campbell (2000) mentions that self-assessment is helpful for students, since students will be able to review, and thus reinforce, what they learned at the course. Race (2004) adds that through self-assessment, students learn how to criticise their work and identify the weaknesses and strengthens, which lead them to improve the quality of their work.

Sims (1995) and Spanbauer (1995) mentioned that quality tools and techniques (see table A.5 in appendix 1) can be valuable to support actions and decisions taken by HEIs leaders and enhance management by fact. Many educators e.g. Kachurick (1994), and Lam and Zhao (1998) apply such tools and techniques effectively e.g. in improving the performance of teaching and learning system, and in evaluating some educational programmes. In addition, there are other effective tools and methods including focus groups, questionnaires (surveys), observations, and interviews.

3.3.9 Continuous Improvement

Zhang (1997) points out that continuous improvement is considered one of the broad aims of several quality awards include; Deming prize in Japan, European quality award in Europe, and MBNQA in the USA. Continuous improvement is considered as a commitment to constant examination of technical and administrative processes in search of better methods (Baidoun and Zairi, 2003). In addition, the concept of continuous improvement should be steadily tied to a continuous assessment of customer needs and depends on a flow of ideas on how to make improvement, reduce variation. Baidoun and Zairi added it is critical to use quality tools and techniques to recognise performance gaps for continuous improvement (e.g. cost of quality, self assessment). Furthermore, continuous improvement is unlimited effort for seeking ways of improve

quality and enhance customer needs and satisfaction (BS EN ISO 9000:2000; Walton, 1985; Goetsch and Davis, 2003; Jabnoun, 2001). Deming (2002), and Bergman and Klefsjo (1994) pointed out that constant quality improvement of production and service systems will lead to constantly decrease costs. The most significant idea introduced by Deming is the cycle of continual improvement named PDCA cycle. This cycle introduces four stages; Plan, Do, Check, and Action (see figure A.1 in appendix 1). Additionally, Oakland (2000) suggests that employees must be trained to use this cycle. Such training should enable them to;

- *E* (Evaluate) the situation and define their objectives.
- *P* (Plan) to achieve those objectives.
- *D* (Do) i.e. implement the plan.
- *C* (Check) that the objectives are being achieved.
- *A* (Action) i.e. take the corrective action if they are not.

This ensures that organisation learns from results, and improves operations and outputs.

Another vital approach for process improvement besides PDCA cycle is the one who developed by J. Juran named 'Juran Trilogy' (Juran, 1989). Figure A.2 in appendix 1 illustrates the three managerial processes of Juran Trilogy; quality planning, quality control, and quality improvement. Kanji (2001) considers that effective continuous improvement process should demonstrate and reflect a number of aspects. For example, organisation continually searches opportunities for improvement, organisation reacts to changes in customer satisfaction indicators, quality improvement methods are used to improve all products, services and processes, and organisation compares current quality levels of service with those of competitors.

Alike in academic environment where people at different levels in HEIs should understand and believe that continuous quality improvement is never-ending task (Seymour (1992)). However, Seymour adds that the challenge is to develop an organisational culture in which people accept the notion that change or striving must be constant. Hence, personal transformation to a mind-set of continuous improvement is a crucial part of culture change (Freed and Klugman, 1997). In HEIs, continuous improvement process should be comprehensive and comprises all educational processes and involve both academic and non-academic staff (Spanbauer, 1995; Lomas, 2004). Spanbauer (1995) indicates that when the philosophy of continuous improvement applied to teaching and learning, it could examine all instructional processes. For example, the entire system of curriculum and instruction, and all other supportive processes commonly called student and/or instructional services. Spanbauer further adds

that in order for HEIs to demonstrate effective continuous improvement process they should be able to communicate their values to individuals and whole society. Also, they should listen to their stakeholders and make the necessary changes that consistent with stakeholder expectations.

Moreover, Temponi (2005) mentions that the need for continuous improvement and the challenges present in its implementation in academic institutions can be attributed to the uniqueness in education and its environment. Such challenges include:

- Employers desire more qualifications for entry-level jobs and expect to hire graduates who have developed a number of specific competencies during their time in college. For such purpose academic institutions need to constantly assess programs of study in collaboration with businesses. This includes maintaining an updated curriculum that motivates employers to hire the institution's graduates.
- Independent bodies are required for assessing and evaluating academic programs offered by academic institutions to address any deficiencies that might emerge in their academic programs. By maintaining the accreditation with such independent bodies, HEIs maintain their reputation and attractiveness to students.
- The complexity of today's business organisations demands a workforce with teamwork orientation, easy to embrace empowerment opportunities, and the acknowledgement of the importance and role of the customer at large. Accordingly, it is important for HEIs to incorporate these issues into programs of study in order for their graduates to be better prepared to compete for the best job opportunities in the twenty-first century's work environment.

Additionally, Freed and Klugman (1997) emphasise the importance of building efficient and effective relationship between HEIs and other communities e.g. business and industry. They added that this could be achieved through establishing a network where are to assist the members sharing the best practices and to enhance active institutional learning for faculty, staff, and trustees. Also, members of HEIs interact with other institutions from industry and business in order to share knowledge and information that could support and enhance the network activities.

Therefore, HEIs should establish effective communication and co-operation links with different business organisations in order to create an environment where knowledge, ideas, exchange information and experience could be achieved between them. This will

provide e.g. an opportunity to graduates of HEIs to possess and develop more skills and abilities for new demands of labor market. Also, assessing and evaluating the quality services provided by HEIs through independent bodies or agencies help those HEIs see themselves from other eye and gives them a chance to priorities their processes for improvement.

3.3.10 Empowerment and Involvement

The concept of empowerment in TQM philosophy is an environment in which people have the ability, the authority, the confidence, and the commitment to take the responsibility and ownership to improve the process in order to achieve organisational values and goals (Besterfield *et al*, 2003; Morris and Haigh, 1996; Goetsch and Davis, 2003). In addition, employees empowerment and involvement could be any effort related to move power and effective involvement of employees in the organisation's processes (Martin, (1993; Curry and Kadasah, 2002). This might include regular access to information, knowledge and participate in operating decisions (e.g. planning, goal setting, and monitoring of performance). Moreover, people who work within the system are the most ones who know how the organisation works and how changes for improvement could be realised (Freed and Klugman, 1997). Thus, it is logical to enable and involve them in decision-making. On the other hand, Employees should be given more responsibility and freedom in order to participate effectively, while employee involvement will remain ineffective for making continuous improvement and limited to just making suggestions (Sun *et al*, 2000; Kondo, 1997; Ang, 2002). This reflects the vital role that can be played by leadership to enhance and support employees to overcome barriers that could hamper effective empowerment. Leadership can do much in this aspect by establishing clear goals, defining responsibilities, motivating and encouraging people, providing the necessary training and facilitate needed information and knowledge.

Likewise, in higher education MBNQA (2004) pointed out that empowerment is to give faculty and staff the authority and responsibility to make decisions and take actions. Also, MBNQA (2004) emphasises the importance of the involvement of faculty and staff in decision-making and in the design of training including clear identification of specific needs. It adds that empowerment is aimed at enabling faculty and staff to respond to students' educational needs, to improve processes, and to improve student learning and organisational performance results. Hence, in order for faculty and staff to

be effectively empowered, HEI should provide them with the required information and knowledge in a timely and useful way to make appropriate decisions and actions.

Cornesky and McCool, (1992) suggests that empowerment should be coupled with establishment of trust in HEIs, while trust exists between employees; faculty and staff will feel empowered. Subsequently they will have greater control of their job. Cornesky and McCool added that when empowerment and trust achieved in the institution, it will be more than participative management, since employees at all levels in HEI are involved directly in self-leadership-skill development. The transformative leadership skills of all staff involved in change will have to be of the highest order if behaviours, beliefs, values and basic assumptions are to be changed (Fullan, 2001). This will lead to reinforce them towards making right decisions and actions to solve problems especially job-related problems.

Moreover, Saunders and Walker (1991) point out that it is essential to involve employers as a part of the team in the design and development of courses provided by HEIs. In addition, employers' involvement should be considered as providing contacts and job opportunities for graduates. Though, universities should think about the future needs of their graduates to such jobs provided by employers and not consider them purely as products.

3.4 Summary of Chapter 3

This chapter provides the analytical framework in section 3.2 which comprises a number of key TQM principles identified from literature review of TQM philosophy. These key principles including; leadership, customer focus, teamwork, open communication, education and training, reward and recognition, commitment to quality, measurement, continuous improvement, empowerment and involvement. Also, this chapter offers the aspects and features of those key principles based on the TQM philosophy. The analytical framework and the aspects of TQM principles will help in the design of the interview protocol. Also, this chapter will support interpreting, analysing and discussing the research findings.

CHAPTER 4

Libyan Higher Education Context

4.1 Introduction

The previous chapter offered the analytical framework comprising a number of themes named key TQM principles. The analytical framework will guide the primary research by providing the broad frame within which data collection and analysis, and theory development could take place. The purpose of this chapter is to investigate the historical and current background of Libyan Higher Education (LHE) context to fulfil the second objective of this research and eventually the research aim. Accordingly, a number of issues that could influence the march of HEIs towards improving their services will be discussed from Libyan educators' point of view. For example, those issues are the local university education development needs, university leadership, characteristics of Libyan HEIs curricula, students' assessment methods, teaching and research and, Libyan HEIs and labour market. Also, this chapter highlights the key problems encountered with the Libyan HE.

4.2 Overview of Libyan Higher Education (LHE)

According to Said *et al* (2004) the education system in Libya includes five stages; these are: kindergarten, basic education, intermediate education (Secondary), university education, post-graduate studies. Figure 4.1 shows the educational structure in Libya as described in the five stages above.

In 1951, when Libya attained its independence, the country did not have the stock of 'trained human capital' to enable the country to develop a course of self-sustained growth (Alhawati *et al*, 2004). Not only were the numbers of 'trained human being' insufficient, but there was also a severe lack of educational institutions to provide the supply of human resources. Salam (1992) points out that one of the legacies of the Turkish and Italian colonisation of Libya is educational backwardness, from which Libyan society still suffers. Salam adds that in 1951, fewer than 10 Libyans had university degrees, and there were only four secondary schools with a total of 25 teachers in the whole of Libya. Only boys attended these secondary schools.

The contemporary LHE established officially in 1955 when the faculty of literature was born in Benghazi (Libya) as an "uncles" of the Libyan University (Said, 2005; AL-Teer, 2005).

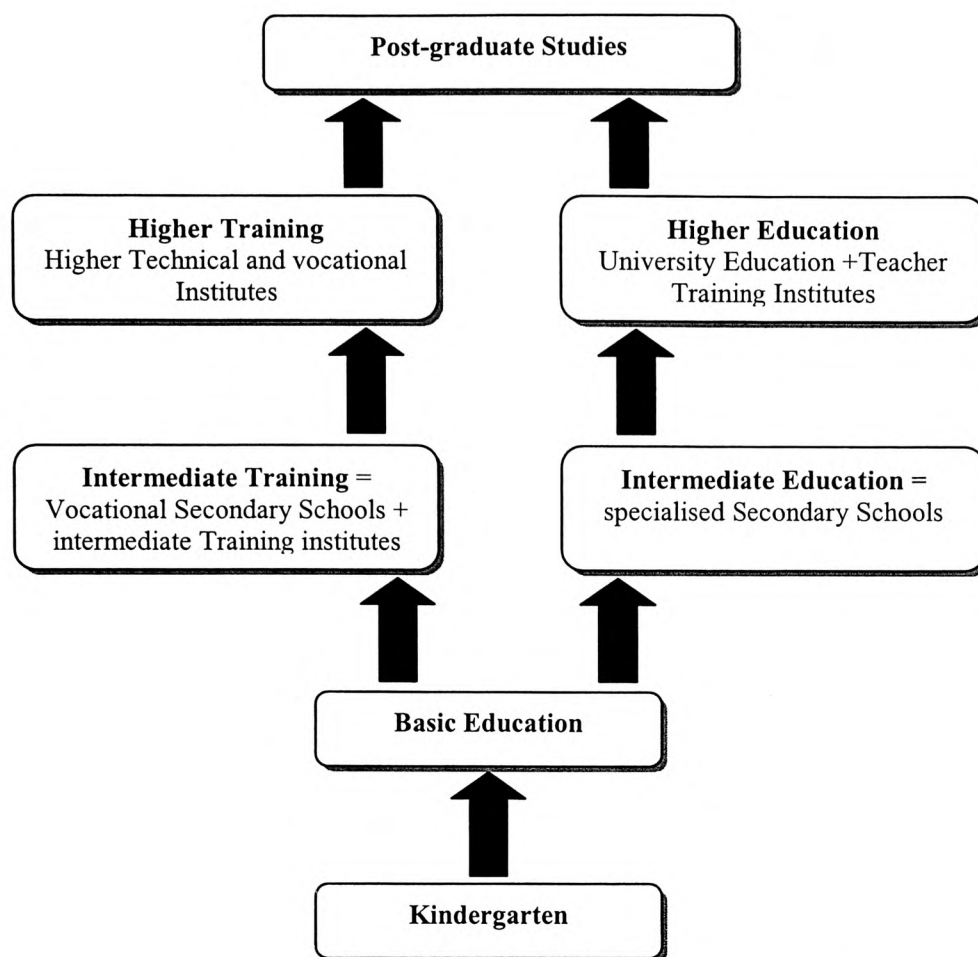


Figure 4.1 Educational Structure in Libya (source adopted: Libyan National Report Presented to the International Conference on Education (2004) in Geneva: 13)

Said adds that the number of students of this faculty was 31 students (all males). Also, in the academic year 1956/57 the faculty of economics and trade (Benghazi), and the faculty of science in (Tripoli) were established. Additionally, table A.12 in appendix 3 shows the increases in student numbers in the public LHE sector from the academic year 1955/1956 to 2001/2002. Also, it can be seen that the percentage of female students is increased rapidly from 1955-2002 in the public LHE. In addition, the number of Libyan public universities in 2002 is 27. However, GSUSM (2005) indicated that the number of such universities was reduced to 13 in 2004 under the Article 118/2004 about re-organising the Libyan public universities. Table A.13 in appendix 3 shows the Libyan public universities and their location in different geographical sites in Libya. Form tables A.12 and A.13 it can be concluded that the Libyan government is insisting spreading HE all over the Libyan territory. This makes sure that all Libyan students in different places of the country are able to take the opportunity to fulfil their desires to attend HE.

The next sections will discuss issues from the literature that could influence the march of Libyan HEIs towards improving their services and activities from Libyan educators' view point. For example, those Libyan educators are Alhawwat *et al* (2004); Al-Teer, (2006); Alfnish *et al* (1998); Said *et al* (2004); Al-Badree (2006); Ali (2006); and Al-Gazal (2006). Also, the following issues given in the next sections will help and enhance interpreting, and discussing the research findings

4.3 The Local University Education and Development Needs

Arab universities which include Libyan universities are criticised because they focus on quantity of students rather than quality of education (Alhawwat *et al*, 2004). Also, Libyan universities graduate a large number of students with low scientific efficiency and knowledge (Alhawwat *et al*, 2004). Since independence in 1951, the Libyan government found that it is important to have Libyan cadres to deal with different administrations in the state. Alhawwat *et al* (2004) and Al-Teer (2006) pointed out that Libyan universities should play its role to prepare such cadres to fulfil the urgent needs of the society which include; teachers, administrators, engineers, and economists. As mentioned in section 4.2 only a few people held a university degree in 1951. In addition, the illiteracy in 1943 was more than 96% amongst males and 99% amongst females (Alhawwat *et al*, 2004). Under such circumstances, Libyan universities contribute to the spreading of general education and culture more than graduate specialists and technicians (Al-Teer, 2006).

Additionally, Al-Teer (2006) states that the spread and rapid establishment of many universities in Libya does not necessarily indicate that LHE provides good quality services. On the other hand, most of the public universities encountered a lack of facilities particularly in the applied sciences faculties (Al-Teer, 2006; Abodeeb, 2006). For example, the number of students enrolled in the dental faculty is 5000 in the academic year 2001/2002 while the capacity to handle students by the faculty was not more than 35 places. Likewise, Alfnish *et al* (1998) stated that the number of enrolled students in LHE increased with no changes in universities' infrastructure and facilities. Furthermore, Said *et al* (2004) pointed out that the university and HE level in Libya, as in other Arab states, is characterised by some properties that might prevent it from performing the desired functions and quality. Those properties are considered as obstacles facing such education. Among these properties are the following:

1. *The increasing number of students enrolled in this educational level compared to the number of population. This is due to social, cultural, and economic transformations, including the high-ranking social view of the value of a university education or an advanced certificate. Such view has its influence*

despite its economic income or its role in increasing the rates of human development.

- 2. There is no need for so many for early enrolment in the labour market due to the well balanced economic aspects of the family.*
- 3. The lower status of intermediate, technical, vocational, and hand-crafted jobs, despite the good economic income for the individual and the society.*
- 4. The number of students enrolled in social and behavioural specialisations has increased despite the accumulating number of their graduates who are searching for jobs (social sciences represent 65% of the university admission).*
- 5. The educational acquisition has declined in some specialisations due to the lack in the educational supplementary instruments, and the unsuitable university interface for the processes of educating and learning.*
- 6. Many of the university staff members are not educationally trained for the teaching process despite their specialised scientific skills that might be distinguished.*
- 7. The lack of standards for choosing university staff members and the need for increasing number of teachers due to the increasing number of students and universities. Also, the different study systems used by the different university faculties (i.e. semester and the academic year systems). All of this and more led to the existence of some unqualified university teaching staff members.*
- 8. The absence of fixed contracting standards with foreign teaching staff members opened a way for unqualified teachers to creep into the university teaching process.*

As indicated above, the increase in enrolment in HE in Libya from 13.427 students in 1975 to 250.000 students in 2003/2004 is considered a positive development indicator (Alhawwat *et al*, 2004). However, Alhawwat *et al* added that this is not enough to judge the performance and quality of the educational system. But, the type of education, the quality of provided outputs, and the efficiency of performance of its institutions are the main issues to judge the performance of educational system.

4.4 University Leadership

The leadership style in Libyan HEIs has been passed through five different styles includes; syncretism system, democratic system, students' administration system, dual administration system, and one public committee system (Alfnish *et al*, 1998). Figure 4.2 illustrates the last leadership style adopted by the Libyan universities (i.e. public committee of university). This committee comprises all university segments include; academic staff members, students, and employees and workers. Also, figure 4.2 provides members of the public committee which includes; president, vice-president, secretary general, faculties' heads, faculty member represents each faculty, student member represents each faculty, representative of student union, and representative of employees and workers.

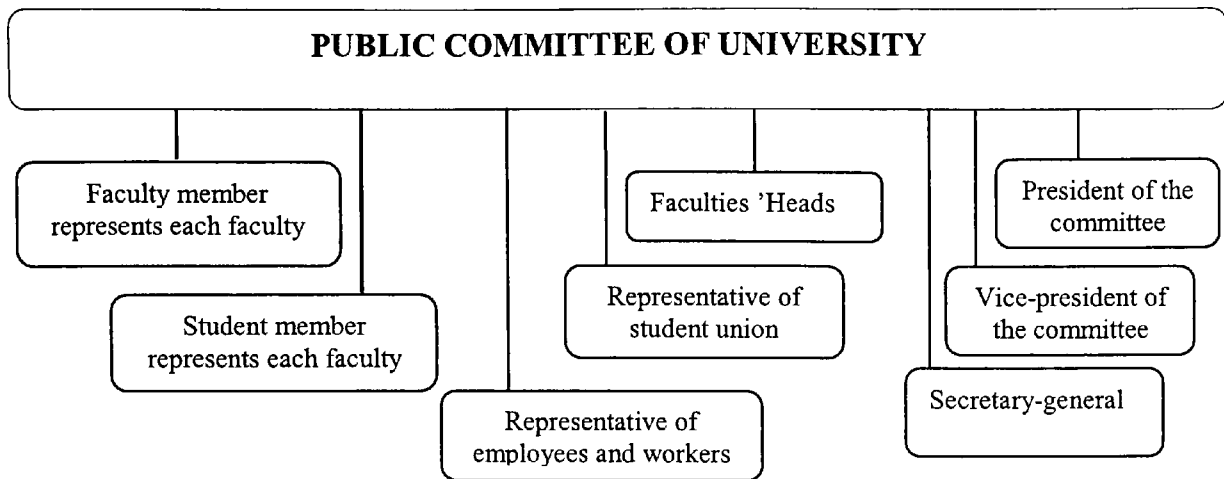


Figure 4.2 The public committee of university (university leadership) (synthesised from GSUSM (2005)).

The public committee of university is the highest authority and the one that is responsible for providing a university's policy plan related to its objectives (GSUSM, 2005). This plan should be within the general aims and objectives of the state's policy. Also, the committee is entitled to lead the university and manage its affairs including managing and investing financial resources, approving educational plans, providing and approving academic degrees, and compiling reward and recognition regulations.

Moreover, there is agreement between Alfnish *et al* (1998) and Al-Teer (2006) that the Libyan university education system was subjected to extreme jolts that made it different from any known educational system. Accordingly, Alfnish *et al* (1998) pointed out that chaos was encountered during the period of 'student administration system' (for eight years) because administration aspects of the university were in disorder. Subsequently, respect for seniority or competence to hold an academic position was undermined (Alfnish *et al*, 1998). Al-Teer (2006) states that Libyan university administration still comes across as bureaucratic and disorganised e.g. many administrative procedures are accomplished only through social relations or common interest. In addition, there is a lack of discipline from most administrators and employees about working within the regulations. Thus, this impacts negatively the academic programmes and other related services provided by the university.

However, in the case of such university's administrative situation the LHE responsible body (i.e. general public committee of HE) decided to intervene to re-organise the university's administration (Alfnish *et al*, 1998). This was carried out by the issuing of a

number of laws and articles concerning academic and administrative regulations. Such regulations help universities tackle and treat many encountered issues.

Although, Al-Badree (2006) recommends that in order to improve the Libyan Universities' administration, the following points should be considered:

1. *Work towards constancy and stability of university administration system in its academic and administration aspects to enable it plan and manage different activities provided by university.*
2. *Independence of Libyan HEIs should be emphasised and stress decentralisation in both administrative and financial entities.*
3. *Work towards constancy and stability of university regulations and laws that manage and organise Libyan universities.*
4. *Libyan universities should be managed through total quality approach in both academic and administrative aspects.*
5. *Libyan universities should adopt scientific standards regarding buildings' specifications, establishment of universities and performance assessment of academic staff.*

Those points reflect many issues that interfere university's decisions which indicate that there is a centralisation in decision-making at the Libyan HE top-management. This is emphasised by Alfnish *et al* (1998) that university nominally prepares its own budget and decides how to use it. But, in most cases such budget and decisions are influenced by the general public committee of HE. Alfnish *et al* added that this impacted many planned educational programmes and affected the extension needs in universities' infrastructure. Al-Teer (2006) indicates that university's regulations are continuously changed. This leads to disregarding of such regulations among different university segments. Additionally, Alhawati (2005) and Al-Turbagya (2005) mentioned that Libyan HEIs should take into account quality development in their provided activities. This could be realised through training their staff on quality methods and the creation of committees for such purpose.

4.5 Characteristics of Libyan HEIs Curricula

The curricula offered by the Libyan HEIs do not match the requirements of the new information era and are not compatible with the ambitions of the Libyan society (Al-Badree, 2006; Al-Rjabi, 2006). Also, General Planning Board Report (2002) points out that the curricula provided by Libyan HEIs in general and postgraduate programmes in particular must be totally changed. Furthermore, Alfnish *et al* (1998) provide the key characteristics of educational programmes and curricula offered by Libya HEIs:

- *Majority of curricula afforded by Libyan HEIs do not fulfil the needs of society and are unable to contribute in solving its problems.*
- *Lack of balance between theoretical and practical parts of the curriculum provided particularly by applied science faculties.*
- *The compilation and delivery of the required syllabus is subject to the teacher's beliefs who ultimately lack the enthusiasm and desire to renew and develop his knowledge. This creates major differences in the materials of same subject offered by peer departments.*
- *There is a gap between curricula provided and students' needs.*
- *There is a gap between curricula offered by Libyan HEIs and the development plans and projects provided by the country.*

It can be concluded that Libyan HEIs should focus on real needs of students. Such needs are derived from market and citizenship requirements. This could be achieved through full understanding of these requirements and translating them into appropriate curricula. Also, Libyan HEIs should focus on the development of problem-solving skills in order to prepare their students for the new era. Such problems could be obtained from the reality; hence HEIs contribute in solving problems facing the society; at the same time they develop their students' skills. Additionally, Libyan HEIs should know how to sustain and encourage their staff members by offering them e.g. training programmes, recognise new values, and motivate them towards the realisation of good quality in their jobs.

4.6 Students' Assessment Methods in Libyan HEIs

Despite lack of information about this issue, Alfnish *et al* (1998) and Abozakhar, (2006) criticised the students' assessment methods adopted by Libyan HEIs. On the other hand, there are two systems of study in Libyan universities (Alfnish *et al*, 1998). First is half year (semester) system and the second is full academic year. In addition, most of Libyan universities applied both systems in their faculties. In spite of advantages and disadvantages of each system it was found that applying both of them in one university hampers educational processes from the following point of views (Alfnish *et al*, 1998):

- *Start and end of the study*
- *Enrolment of new students*
- *Examinations' processes*
- *Vacations of staff members and students*

Also, if the systems of study are different in peer faculties, this will not give opportunity for students to move from faculty to another.

Additionally, unseen exams are the main method adopted to assess and evaluate the performance of students in the Libyan Universities (Alfnish *et al*, 1998). These exams are divided into two categories; two to three mid term exams and final exam. The percentage of mid terms is between 40%-50% and the rest is for the final exam. Such exams are managed by special committees comprising a number of academic staff members. The level of success of students is according the following scores:

- Excellent from 85%-100%
- Very Good from 75%-84%
- Good from 65%-74%
- Pass from 50%-64%

If the student's score is between 35%-49% he/she fails and described as weak, and if student's score is less than 35% he is very weak. Such scores are critical for student, because he/she might be dismissed from the faculty.

Furthermore, Abozakhar, (2006) mentioned that in the full academic year system e.g. if the time schedule of a subject is 3 hours/week this means 90 hours in full academic year. The final exam takes 2 hours and evaluated as 70% of the total marks. However, these two hours represent only 2.2222% out of the total hours. Abozakhar adds that such way has many negative aspects include:

- *The student knows that the evaluation will be in two hours at the end of the year. This leads him to postpone studying up to last minute. This reflects the weakness of the learning process.*
- *If the evaluation occurs only at the end of the year, this leads teacher not to be serious to pursue students and continuously evaluate them during the year.*

This indicates that such methods and ways of students' evaluations are ineffective. Thus Libyan universities should adopt a students' evaluation or assessment philosophy that encourages students to gain knowledge in an effective manner (Abozakhar, 2006).

4.7 Teaching and Research in Libyan HEIs

As mentioned in section 2.2.6.2, teaching and learning processes are the cornerstone of any HEI's function. However, maintaining the quality of such processes is considered a continuous challenge for HEIs. Based on section 1.1 the main teaching methods used by Libyan HEIs are traditional lectures. Also, Alfnish *et al*, (1998) indicate three main reasons behind using this type of lectures. Such reasons include; increases in number of students, financial resources and staff training, and administrative system. In spite of the weaknesses of such type of lectures, it provides teachers with the means to complete the required course material and provide students with a clear-cut minimum of material

that they can easily memorise (Sarayrah, 2003). Therefore, students are not contributing to the learning process in the classrooms. They are only listening and taking notes. Furthermore, the use of new technology in Libyan HEIs e.g. computers, multimedia and learning aids in general is away behind international best practice (Porter and Yergin, 2006). Nonetheless, MBNQA (2004) points out that in order to involve students effectively in the learning processes, the organisation (HEI) should adopt 'active learning' notion. MBQNA (2004) defines active learning as:

The term "active learning" refers to interactive instructional techniques that engage students in such higher-order thinking tasks as analysis, synthesis, and evaluation. Students engaged in active learning might use resources beyond the faculty, such as libraries, Web sites, interviews, or focus groups, to obtain information. They may demonstrate their abilities to analyse, synthesise, and evaluate through projects, presentations, experiments, simulations, internships, practicums, independent study projects, peer teaching, role playing, or written documents. Students involved in active learning often organise their work, research information, discuss and explain ideas, observe demonstrations or phenomena, solve problems, and formulate questions of their own. Active learning is often combined with cooperative or collaborative learning in which students work interactively in teams that promote interdependence and individual accountability to accomplish a common goal.

Libyan universities could benefit from the active learning notion, where students become not only listeners in the class, but they interact with the teacher and discuss together the knowledge offered by the subject. The notion of active learning encourages students to use various resources of knowledge. Also, it persuades them to integrate and employ information efficiently towards realising the goal(s). Likewise, students become enabled to create questions and discuss new ideas besides working in teams where information could be exchanged effectively.

Additionally, teacher's load in Libyan universities is typically large, e.g. the average teaching hours for all teaching staff is 24 hours/week despite their academic degree (Al-Teer (2006). Thus, professors find it difficult to pay attention and focus on research activity. However, some professors provide extra efforts for writing and publishing e.g. text books in order to increase their incomes. Consequently, Libyan universities were not able to establish a scientific research tradition (Al-Teer, 2006; Alfnish *et al*, 1998; Al-Badree (2006). Hmad (2006) points out that most of research offered by Libyan universities is in a form of 'research exercise' i.e. dissertations introduced by students to obtain certificates. Likewise, research provided by academic staff to fulfil the requirements of academic and job promotion. Therefore, the goals of such research have

not emerged from the real needs of society (Hmad, 2006). LBES/GCR (Libyan business executive survey/global competitiveness report) ranks Libya 97th out of the 111 countries in university/industry research collaboration (Porter and Yergin (2006).

The postgraduate programmes in Libyan universities established in 1973 in some faculties include education (in Al-Fateh University) and literature (in Garyounis University) (Alhawwat *et al*, 2004). Also, the number of postgraduate students who obtained a Master's degree from Libyan universities is 3150 students in different fields. The number of students who obtained PhD degree is 40 students from only three universities including Al-Fateh, Garyounis and Seventh of April (Alhawwat *et al*, 2004). In addition, the number of students who went abroad to accomplish their postgraduate studies are 3500 in academic year 2004/2005 (Said, 2005).

However, there is agreement among a number of Libyan educators including Alfnish *et al*, (1998), Alhawwat (1996), and Al-Badree (2006) that postgraduate programmes in Libyan universities encountered the following:

1. The absence of clear philosophy and objectives
2. Lack of different facilities including necessary funds, labs and equipments, and journals and scientific references.
3. Lack of qualified and expert in academic staff particularly in applied science.
4. The acceptance policy in postgraduate programmes is based only on marks criterion and does not consider students desires and skills. Also, does not assess student from ability and readiness point of view.
5. Lack of constancy and stability of postgraduate regulations.
6. Postgraduate regulations do not reflect the Libyan atmosphere and situation, because it is emerged as a result of academic staff viewpoints and believe who graduated abroad from different universities.
7. Despite differences in nature of the fields, there are major differences among students' performance assessment methods.
8. The link between postgraduate research and society needs is required.

The above eight points indicate that there is a lack of planning and strategic objectives for postgraduate programmes offered by Libyan universities. The responsible bodies in Libyan universities and/or Libyan HE are unable to manage and provide efficient policy to incorporate and align society's needs with their research activities. Also, the shortage in facilities e.g. libraries and laboratories hamper efficient research.

4.8 Libyan HEIs and Labour Market

The importance of HE is wider than providing a specific theoretical and practical curriculum. Also, it develops students' skills, knowledge and makes them more capable to deal with future jobs. Swafy and Ghatass (2003) pointed out that HE systems in developing countries are focused on certifications and qualifications (Diploma Disease) and not to deliver skills and knowledge to their students. This means that the criterion for obtaining a job is qualification and not skills and capability. Swafy and Ghatass added that the examination systems in such countries are designed to assess students' memorisation and not their skills. Consequently, most developing countries encountered the problem called "Educated Unemployment". This indicates that there is no link between educational programmes provided by HEIs and the labour market needs.

Furthermore, Ali (2006) mentions that despite faithfulness and good intention towards developing Libyan HE, this sector still graduates a high number of students with low skills and capabilities. Ali considers that the gap between educational programmes offered by Libyan HEIs and the rapid changes in occupations' nature is one of the important factors to fulfil the labour market needs. In this context, MBQNA (2004) considers agility is an important aspect in HEI effectiveness. This indicates that HEI should respond in a fast and flexible way to the needs of its stakeholders including labour market. Also, HEI should involve and listen to its stakeholders and address their expectations.

Additionally, Ali (2006) points out that the number of job seekers in Libya has dramatically increased from 26.4 thousands in 1995 to 95 thousands in 1999. Also, it should be noted that this number does not represent the whole number of job seekers since many of them did not register in workforce office. Ali comments that this indicates that there is a gap between the preparation of human resources and labour market needs. In addition, the ratio of job seekers who graduated from HEIs in Libya represents 22.4% out of total job seekers registered in the workforce office. Table A.14 in appendix 3 illustrates the number of job seekers from males and females who holds Bachelor, Licentiate, High Diploma, the percentage of each degree and the total number of graduates. In addition to the lack of co-ordination between HEIs and the needs of labour market, Al-Gazal (2006) points out that the co-ordination among Libyan HEIs is required. Al-Gazal adds that many Libyan HEIs have the same faculties particularly in social science which lead to the accumulation of student numbers in same specialties.

Finally, it can be concluded from the above research that Libyan HEIs encountered a number of issues including leadership, curricula, teaching and research and relationship with the labour market. Porter and Yergin (2006) summaries that in the following quotation:

“Despite the lack of accurate information, it is clear that education in Libya include HE has quality issues. These stem from two sources: problems with the quality of inputs, such as curricula, teachers and the educational infrastructure; and a number of structural issues. These include the lack of reliable and objective standards, no central body to provide overall planning and monitoring, inefficient allocation of public resources, and a lack of resources in specific areas”.

In addition, Al-Badree (2006) highlights the following key problems come across with Libyan HE:

1. Lack of clear philosophy and objectives.
2. Absence of scientific planning for building human cadres needed by society.
3. Absence of effective administration.
4. Lack of self-building in Libyan HEIs regarding academic staff members' availability.
5. Lack of common students' acceptance policy based on scientific and international criteria.
6. Absence of effective contribution from academic staff members in research activity, because of high teaching load.
7. Shortage of research activities in Libyan HEIs due to high teaching load or/and lack of required facilities needed by scientific research.
8. Ineffectiveness of postgraduate programmes and inability to realise its goals and objectives.
9. Rely on traditional teaching methods.
10. Rely on traditional methods of student's performance assessment which do not consider the real readiness, capability and skills of student.

Accordingly, responsible bodies both in Libyan HE and in Libyan HEIs should work towards adopting effective strategic plan that considers and efficiently tackles all issues mentioned above. In order to achieve that, such issues should be undertaken totally through identifying and addressing relationship between them. Libyan HEIs should create a network to enhance the flow of information and support co-operation among them.

4.9 Summary of Chapter 4

This chapter is presented to highlight and influence interview protocol and direction, and to aid understanding of possible interviewees' responses within the Libyan context.

Consequently, this chapter has highlighted the historical and current background of LHE context. It has done this by giving an overview idea about the development of the contemporary LHE. Also, this chapter presents a number of issues addressed by many Libyan educators. Such issues could influence the improvement of services and activities offered by Libyan HEIs. Those issues are; the local university education and development needs, university leadership, characteristics of Libyan HEIs curricula, students' assessment methods, teaching and research, and Libyan HEIs and the labour market. Accordingly, the education policy was to graduate people to fulfil the argent needs of the society (i.e. cadres). Thus, Libyan universities focused on quantity of students rather than quality of education outputs. Additionally, university's administration still comes across with many problems. For example, bureaucracy, anarchy, centralisation in decision-making, and inconstancy and unsteadiness of university regulations. Furthermore, curricula provided by Libyan HEIs are required to be more related to the society needs. Unseen exams (traditional exams) are the main assessment method of students' performance. Furthermore, the link between educational programmes provided by Libyan HEIs and labour market needs is required. Finally some key problems encountered LHE were highlighted.

CHAPTER 5

Research Methodology

5.1 Introduction

This chapter could be considered as the most critical chapter in the thesis, as it aims to provide a broad explanation of the methodological issues regarding this research. Gardner and Lehmann (2002) argue that within every research project there is a need to develop a logical approach to undertaking the research, and a set of activities or methods that will facilitate the collection and analysis of data relevant to the issue under investigation. Additionally, Adam and Haley (2000) stated that research methodology is the overall approach, and within that the individual research methods and tools used to meet a given research objective. A clear and unambiguous statement of the research objective is therefore necessary, to enable the selection of an appropriate research methodology and data collection techniques. Arbnor and Bjerke (1997) see research methods as guiding principles for certain knowledge. For such principles to be effective, they must “fit” both the problem under consideration and the ultimate presumptions held by the creator of knowledge. There is no specific rule as to which one to select when doing research. It all depends on the nature and scope of the thesis, the source of the data, the research questions and hypotheses or proposal, and constraints and scope of the research, (Yin, 1994; Jankowicz; 1993; Bell, 1999), and the overall research aim. Therefore, research methodology is a way of how one goes about carrying out the research. This commences with identifying a problem and the nature of phenomenon to be studied, which was accordingly outlined in chapter 1, section 1.2 which contextualised the problem area.

In order to achieve the aim and objectives of the research, the researcher dedicated the preceding chapters to provide an introduction to the research (Chapter 1). Also, Chapter 2 reviewed the relevant literature about the related research topic both in TQM theory and TQM in HE. Chapter 3 provides the analytical framework as a result of that review, from which to derive questions for the empirical work. In Chapter 4, the researcher provides information about the Libyan HE context (the environment of the case study research). This chapter details and justifies the research methodology adopted in respect of the fieldwork. Also, it presents an overview of types of research philosophy, research strategy and methods of data collection, and it concentrates on the main data collection technique used in this study, that being the semi-structured interview. In addition, this

chapter also discusses the process of fieldwork, specifically the pilot study, the research population (target interviewees), data collection, and data analysis.

5.2 Literature Review

It is well documented that researchers need to establish a clear understanding of the existing body of knowledge in their specialisation area, which should come through an extensive literature review (Saunders *et al*, 2003; Sekaran, 2003; Yin, 1994; Yin, 2003). Likewise, the literature review of this research is to be conducted to enable the researcher to know and understand the Total Quality Management (TQM) concepts, theory, models, knowledge and information provided in this field both in general and in Higher Education (HE) by many authors which include quality gurus, experts, and writers. Accordingly, this research started with an extensive review of literature on TQM philosophy in general and in HE in chapter 2 in addition to the aspects of key TQM philosophy offered by the analytical framework in chapter 3. Also, review of the Libyan HE (LHE) context was occurred in chapter 4. The researcher used library search, electronic journals, and Internet search facilities to develop the literature review. This literature review also, used books, academic journal articles, conference proceedings, and different reports and related documents. That was intended to enable the researcher to recognise the relevant research aim and objectives. Also, this literature review serves as the foundation for the analytical framework (Sekaran, 2003) which is used to generate the interview protocol for data collection. Furthermore, the review is used to facilitate the discussion of the research findings, in addition to the suitable methodology to conduct the research.

5.3 Adoption of the Research Philosophy

It is important for researchers to take into consideration the research philosophy or paradigm when deciding on the research design. Saunders *et al* (2003) stated that the research philosophy reflects “the way we think” about the development of knowledge, which in turn affects “the way we go about doing research”. In this respect, Easterby-Smith *et al* (2002) state that there are at least three reasons why an understanding of philosophical issues is very useful:

1. *It can help in clarifying research designs.*
2. *Knowledge of philosophy can help the researcher to recognise which design will work and which will not. It should enable a researcher to avoid going up too many blind alleys and should indicate the limitations of particular approaches.*
3. *Knowledge of philosophy can help the researcher identify, and even create, designs that may be outside his or her past experience. And it may also suggest*

how to adopt research designs according to the constraints of different subject of knowledge structures”.

In the same context, Creswell (2003) observed a strong link between the design of the study, i.e. the overall approach followed to solve the particular research questions, and the paradigm of scientific inquiry, which sets the philosophical basis for the research.

Many authors in research methodology include Easterby-Smith *et al* (2002), Saunders *et al* (2003), Collis and Hussey (2003), Amaratunga *et al* (2002), and Remenyi *et al* (1998), have stated that there are two main philosophical stances dominant in the literature. These philosophical stances are phenomenology (interpretivism / constructionism) and positivism, and both have an important role to play in business and management research.

Seville and Perret, (2001) state, *“For positivists, reality exists in itself. It has an objective essence, which researchers must seek to discover”*. In the same vein, Bailey (1996) points out that positivists believe that there is a truth or objective reality waiting to be discovered by social scientists, and that researchers discover this reality by staying detached, neutral and objective throughout the research. According to Saunders *et al* (2003), there are a number of distinguishing aspects of positivist research: it is deductive, it includes gathering and analysing quantitative data, and it involves highly structured methodologies to facilitate replication. May (1997) points out that positivists do not pay much attention to the detail of people’s inner mental states. Collis and Hussey (2003) report that quantitative, objectivist; scientific experimentalists, and traditionalist, are alternative terms for the positivistic paradigm.

However, phenomenology (interpretivism/constructionism) is the science of phenomena, whereby the focus is on the meaning, rather than the measurement, of social phenomena (Hussey and Hussey, 1997; Collis and Hussey, 2003). Easterby-Smith (1991) claims that, phenomenology approach tries to understand and explain a phenomenon rather than search for external causes or fundamental laws. Crotty (1998) claims: *“Constructionism assumes that there is no objective truth waiting for us to discover it. Truth, or meaning, comes into existence in and out of our engagement with the realities in our world. There is no meaning without a mind. Meaning is not discovered, but constructed”*. Moreover, constructionists believe that in order to understand the reality it is essential to discover the details of the situation or maybe a reality working behind them (Remenyi *et al*, 1998; cited in Saunders *et al*, 2003:84). In addition, interpretations are likely shared between people, however there are significant

social forces and processes that have an effect on people's interpretations and behaviours without their necessarily being aware of the existence of such influences, and that is recognised by social constructionism (Saunders *et al*, 2003). Phenomenologists (constructionists) focusing on understanding the phenomena in depth to answer questions such as: what, why and how. In this concept the researcher is not independent of what is being investigated, but is a part of it (Remenyi *et al*, 1998). Within this viewpoint, all knowledge is socially-constructed, and gathering evidence in a social environment reflects socially-constructed images, or interpretations of reality, rather than scientific fact, so in order to understand human behaviour, the context in which it occurs should be appreciated (Greenfield, 1996; Welman and Kruger, 2001).

Consequently, this study's grounding within the interpretive paradigm accepts reality as being socially constructed, rather than objectively determined. In accordance with Hyde (2000), the study has attempted to identify underlying concepts and analyse the relationships between them - the phenomenon under investigation and analysis, and the context within which it occurs are interlinked and cannot easily be separated. The key features of phenomenology (interpretivism/constructionism) and positivism are given in table 5.1.

Table 5.1 the key features of positivist and Phenomenological Paradigms (source adopted: Easterby-Smith et al (1991:27)).

Description	Positivist paradigm	Phenomenological paradigm
Basic beliefs	<ul style="list-style-type: none"> • The world is external and objective. • Observer is independent. • Science is value-free. 	<ul style="list-style-type: none"> • The world is socially constructed and subjective. • Observer is part of what observed. • Science is driven by human interests.
Researcher should	<ul style="list-style-type: none"> • Focus on facts • Look for causality and fundamental laws • Reduce phenomena to simplest elements. • Formulate hypotheses and then test them. 	<ul style="list-style-type: none"> • Focus on meanings. • Try to understand what is happening. • Look at the totality of each situation. • Develop ideas through induction from data.
Preferred methods include	<ul style="list-style-type: none"> • Operationalising concepts so that they can be measured. • Taking large samples. 	<ul style="list-style-type: none"> • Using multiple methods to establish different views of phenomena. • Small samples investigated in depth or over time.

Based on the above discussions and the group of the implications of these two main philosophies summarised in table 5.1, and also the nature of this research, the interpretivism/social constructionism (phenomenological) has been chosen as the research philosophy. This adopted paradigm supported in the work of Yin (1994) and

Yin (2003) in discussing ‘case study’ research as a method for acquiring in-depth knowledge from qualitative study. Since critics of the positivist paradigm argue that its methods largely remove context from meaning during the process of developing quantified measures of the phenomena under investigation, this approach has been avoided. Such an approach would have resulted in the study’s subjects’ meanings, contexts and interpretations being largely excluded from the data that were collected (Guba and Lincoln, 1994; Gephart, 1999). In essence positivism seeks to develop causal explanations for phenomena and in doing so attempts to reduce the whole into its simplest elements in order to facilitate its further analysis (Remenyi *et al.* 1998; Amaratunga and Baldry 2001). Such a stance is clearly inappropriate to the aim of this research project since the research is seeking in-depth understanding of the phenomena under investigation within the two embedded case studies as discussed later in 5.6, 5.6.1.1 and 5.6.1.2

5.4 A Critique of the Two Research Approaches (Qualitative and Quantitative)

There are two major categories of approaches to research. These two approaches are named qualitative and quantitative (Merriam, 1988; Hussey and Hussey, 1997). Denzin and Lincoln (2000) mentioned that qualitative research implies an emphasis on the qualities of entities, and on processes and meanings that are not experimentally examined or measured (if measured at all) in terms of quantity, amount, intensity, or frequency. They added, in contrast qualitative studies emphasise the measurement and analysis of casual relationships between variables not processes. Table 5.2 shows the key features of the main two research approaches.

Table 5.2 features of the two research approaches (source adopted: Hussey and Hussey (1997:54))

Qualitative (Phenomenological)	Quantitative (Positivistic)
Uses small samples	Uses large samples
Concerned with generating theories	Concerned with hypothesis testing
Data is rich and subjective	Data is highly specific
The location is natural	The location is artificial
Reliability is low	Reliability is high
Validity is high	Validity is low
Generalisation from one setting to another	Generalisation from sample to population

During qualitative research, the researcher is interested in meaning and understanding of a phenomenon (Merriam, 1988). This approach is to some extent in accordance with

Taylor and Bogdan (1984), who characterise a good qualitative study as a combination of in-depth understanding of the particular setting investigated with general theoretical insights. Ghauri *et al*, (1995) stated that “*Qualitative methods are therefore more suitable when the objectives of the study demands in-depth insight into a phenomenon*”. Also, qualitative research can be attuned to change, sequences of events and behaviours and transformation of culture (Dayman and Holloway, 2002).

Denzin and Lincoln (2000) pointed out that qualitative research means to study things in their natural settings. Denzin and Lincoln added, qualitative research is commonly used in human and social science, where there is a need of nearness to the subject studied. It is used to understand a particular situation for an individual, group or organisation (Yin, 1994). Rudestam and Newton (2001) mentioned that within qualitative research the researcher will be more flexible in exploring phenomena in their natural environment, rather than being restricted in a relatively narrow band of behaviour. Also, qualitative approach implies that the data are in the form of words as opposed to numbers; these data are normally reduced to themes and categories (likewise this research) and are evaluated subjectively (Hussey and Hussey, 1997). Hence, it is appropriate to use themes in this research as discussed in the analytical framework (chapter 3), and within those themes through semi-structure interviews (words).

Additionally, Ghauri *et al* (1995) mentioned that qualitative methods are generally accepted for exploratory research. Also, qualitative methods are most appropriate when the objectives of the research demand in-depth insight into a phenomenon such as in this PhD study. According to Strauss and Corbin (1998), qualitative methods can provide better understanding of the phenomenon about which little is yet known.

However, quantitative research usually emphasises quantification in the collection and analysis of data. Blaxter *et al* (1998) explained that quantitative research is as the term implies, concerned with the collection and analysis of data, and in numeric form, it emphasises relatively large-scale and representative sets of data. Also, it is often falsely in their view, presented or perceived as being about the gathering of facts. Furthermore, Ragin (1994), observes that quantitative methods concentrate directly on relationships among variables, especially the effects of cause on outcome; and Leedy (1993) confirms that when the data is numerical, the methodology is quantitative. On the other hand, Lee (1992) points out that the quantitative methodology is seen as increasingly inadequate, especially in cross-cultural research. Lee adds that attention should be focused on the search for effective alternatives, and this argument has led to the realisation of the

qualitative approach which emphasises the description of culture and meaning. In the same context, Denzin and Lincoln (2000) argued that quantitative researchers seldom are able to capture the subject's perspective because they have to rely on remote, inferential empirical materials.

5.5 Justification of the Research Philosophy (phenomenological) and Research Approach (Qualitative) Adopted

There remains some discussion amongst the current literature concerning research methods, as to which approach is the most valid. Oppenheim (1992) has argued that choosing the best design or the best approach is a matter of appropriateness. Oppenheim adds that no single approach is always or necessarily superior; it all depends on what is needed to be found and on the type of question which the research aims to answer. However, as Jankowicz (2000) notes the decision regarding which research method to employ should always be taken in consideration of the research objectives. Therefore, if the research objectives demand a thorough understanding of a certain phenomenon, in this case a qualitative approach is more appropriate. Creswell (2003) points out that quantitative researchers usually derive a problem from the literature, in which case a substantial body of literature may be available in terms of variables and existing theories that may need testing or verification. On the other hand, when the research topic is new and controversial and where there is little literature, it may be more appropriate to generate data and analyse them to formulate a theory, which demands a qualitative approach.

Additionally, qualitative researchers usually focus on the context that may shape the understanding of the phenomenon being studied. In this way, in many qualitative studies, a theory base does not guide the study because the theories available are not sufficient or complete, and sometimes may be missing entirely. Also, the nature of phenomena plays an important role in deciding the research approach and design. In the same view, Easterby-Smith *et al* (1991) pointed out that the appropriateness of research approach or design is highly reliant on the social phenomenon to be explored. For example, Easterby-Smith *et al* said positivist design could be more appropriate to finance and accounting research than human resource management or organisational behaviour research. Because positivist design usually targeted on measurable and quantified factors, however, human resource management or organisational behaviour research are mostly about views, beliefs, and values. So, phenomenological is more appropriate in this case. Arksey and Knight (1999) reported that qualitative approaches

direct attention to discover what people think, what happens and why. Bogdan and Taylor (1975) stated that qualitative research produces descriptive and explanatory data of people's written or spoken words and observable behaviour, rather than prediction.

This study aims to investigate issues enabling and affecting the quality of services provided by Libyan public universities context using TQM philosophy as a framework (as a lens) for this purpose. Hence, the researcher will seek a deeper understanding of the phenomenon of those issues in the Libyan HE context in both embedded case studies, and has chosen the phenomenological research paradigm and a qualitative methodology (Rudestam and Newton, 2001; Silverman, 2003). Denzin and Lincoln (2003) stated that qualitative research is a situated activity that locates the observer in the world.

The research will be exploratory and explanatory, as such exercises are conducted when little information is available about the situation, and this is the case concerning the topic of issues enabling and affecting the quality of services in the Libyan HE context. It is also appropriate in instances when there is no information on how similar research problems have been solved previously. In such cases, extensive work is required to become familiar with the phenomena, after which, more rigorous research can proceed (Sekaran, 2003). It seems clear that Hussey and Hussey (1997), Sekaran (2003), Denzin and Lincoln (2003), Ghauri *et al* (1995) and Silverman (2001), provide views that support the use of a qualitative approach for this study.

5.6 Research Strategy-The Case Study

Within the interpretive paradigm adopted many research methodologies and research strategies were available to the researcher. Yin (2003) identifies five types of design which are: the experiment, survey, the analysis of archival information, a history, and the case study. The choice of strategy is crucial since, as Yin (2003) notes, each has both advantages and disadvantages based upon the type of research questions being posed, the level of control the researcher has over behavioural events and whether the research focuses upon contemporary or historical events. The purpose of the research strategy is to satisfy the research aim and objectives given in sections 1.3. As a research strategy, the case study is used in many situations. Yin (1994) mentions that it could be used in organisational and management studies. Yin adds that it could be used in conducting research for dissertations and theses in the social sciences, in the academic disciplines, as well as in professional fields such as business administration,

management science, and social work. Table 5.3 summarises the research strategies available to the researcher.

Table 5.3 different Research Strategies (source adopted: Yin (2003:5))

Strategy	Form of Research Question	Requires of Control of Behavioural?	Focuses on Contemporary Events?
Experimental	How, Why?	Yes	Yes
Survey	Who, What, Where, How many, How much?	No	Yes
Archival analysis	Who, What, Where, How many, How much?	No	Yes/No
History	How, Why?	No	No
Case study	How, Why?	No	Yes

A case study can be considered as an intensive and holistic description and an analysis of a restricted phenomenon (Merriam, 1998). In addition, a case study methodology is suitable when the aim is to better understanding complex social phenomena and is an empirical inquiry that investigates a contemporary phenomenon within its real-life context using multiple sources of evidence (Robson, 1999). Yin (1994) points out that the case study methodology is especially useful when the boundaries between phenomenon and context are not clearly evident. Also, when the focus on the process rather than the result, on the context rather than specific variables, and on discoveries instead of proving casual connections (Merriam, 1998).

Additionally, Van der Velde *et al* (2004) mentioned that case study methodology can provide deeper insight into the ways in which people and departments respond to each other, have mutual expectations about each other and accommodate their behaviour to each other. Van der Velde *et al* added that the most important characteristic of a case study is that a researcher can systematically describe a single case; this case could be a company, a department or even a single individual.

Yin (1994) points out that one important application of a case study methodology is when a researcher wants to explore situations in which the intervention being evaluated has no clear, single set of outcomes. A second application is to describe an intervention and the real-life context in which it occurred. Yin adds that case study strategy may also be used to explain the casual links in real-life intervention that are too complex for survey or experimental strategy. Accordingly, a case study can be used for exploratory, descriptive or explanatory purposes. As this is exploratory research which seeks to investigate issues enabling and affecting the quality of services in the Libyan HE

context through the two embedded case studies. In the same vein, Robson (1993) suggested the use of the case study method to achieve a rich understanding of the context of the research and the processes being enacted.

However, there is also methodological criticism against the case study methodology. Yin (1994) points out that within the academic community researchers who reject “case study” method do so mainly referring to the method’s lack of rigour and the difficulties for scientific generalisation. In the same context, Van der Velde *et al* (2004) mentioned that a disadvantage of the case study is that the results are not statistically generalisable. Van der Velde *et al* added that the results obtained are only valid for the specific situation of individuals, company or the department that is studied. For this reason, a case study is not generalised to a population of cases (e.g. to other companies, departments or organisations), but to theoretical domain. This is called analytical generalisation. Hamel *et al* (1993) suggested deficit of the case study is that it is considered to be time consuming and generates massive amount of data, which often in not being used.

Yet, the researcher who decided to use even one, two or more case studies should take into consideration the ability to verify a proper saturation through getting appropriate information. Therefore the case study is an important design (method) when conducting research, as it allows the researcher to focus on a specific instance or circumstance, and to attempt to identify the various interactive processes at work. Also, the case study is appropriate for individual researchers since it gives a chance to view a problem to be studied in depth. In addition, the case study has the strength from its ability to deal with a full variety of evidence – documents, interviews, and observations – beyond what might be available in the conventional historic study.

In general a case study is preferred when the investigator has little control over events, and when the focus is on a contemporary context within some real-life. Based on the above discussion given in this section, a case study was considered to be the most suitable research strategy for this research, since it is capable to achieve the research objectives.

5.6.1 Single Case or Multiple Cases

A primary distinction when adopting case study design is between single case and multiple cases designs (Yin, 2003). Both designs can further on be classified as holistic or embedded design, depending on the defined unit of analysis (Yin, 2003). This

research will adopt a single case study design for the reasons presented in the next section.

5.6.1.1 Single Case Study

The single case study is an appropriate design under several circumstances; Yin (2003) provides five rationales for adopting single case study. First, when it represents the *critical* case in testing a well-formulated theory. The theory has specified a clear set of propositions as well as the circumstances within which the propositions are believed to be true. To confirm, challenge, or extend the theory, a single case may meet all of the conditions for testing the theory. Second, is when the case represents an *extreme* case or a *unique* case for example, in clinical psychology, in which a specific injury or disorder may be so rare that any single case is worth documenting and analysing. A third rational is called *representative* or *typical* case. In this rational, the objective is to capture the circumstances and conditions of an everyday or commonplace situation. For example, the case may represent a typical project among many different projects, a manufacturing firm believed to be typical of many other manufacturing firms in the same industry, or a representative school. The lessons learned from these cases are assumed to be informative about the experiences of the average person or institution. A fourth rational case is called *revelatory* case, it ~~is~~ exists when an investigator has an opportunity to observe and analyse a phenomenon previously inaccessible to scientific investigation. Finally, *longitudinal* case is the fifth rational case where studying the same single case at two or more different points in time.

As discussed above, Yin (2003) affirms that the single case study approach can be used when the case is a *representative* or *typical* case. This situation is applied to the present research and therefore the exploratory single case study approach was entirely appropriate. However, Yin (2003) adds that the great advantage of exploratory case study approach is that by focusing on a single case, the case can be intensively examined even when the research resources at the investigator's disposal are relatively limited. Yin (2003) states that a single case study can be examined as embedded units, this occurs within a single case when attention is also given to a subunit(s), this is called an *embedded case study design*. Yin (2003) further adds that embedded case(s) design improving rigour in providing internal validity of findings. On the other hand, if the case study examined only the global nature of an organisation or a program a *holistic design* would be used. Figure 5.1 shows the basic types of designs for single case study (Yin, 2003).

5.6 .1.2 Embedded Case Study Approach

Based on the discussion provided above and illustration presented by figure 5.1 the researcher adopted embedded case study design (multiple units of analysis). Figure 5.2 illustrates the single case study design adopted by the research, where the context is the Libyan HE, Al-Fateh University (AFU) as the case, and Electric & Electronic Department (EED) and Social Services Department (SSD) as embedded units of analysis 1 and 2 respectively.

Al-Fateh University (AFU) as a case study is firmly established and deep-rooted public university in Libya. AFU contributes effectively in establishing many universities in Libya by providing consultants and educators who are expert in curriculum, academic administration, and teaching (GSUSM, 2005). Therefore, these collaborations contribute to similarities within all Libyan universities. AFU is the biggest university in Libya and one of the oldest Libyan public Universities (established in 1957) besides Garyounis University (1955) in Benghazi (see appendix 3 table A.12). AFU encompasses 13 different faculties with 70145 students and 1970 (1721 male and 249 female) academic staff members in academic year 2003-2004 (GSUSM, 2005) and has grown since then. AFU offers certificates in bachelor and licentiate (as a university degree) both in applied science, and humanity and arts respectively. Also, it offers postgraduate degrees include PGD, MSc. and PhD in different fields. Furthermore, AFU comprises a number of research centres and service units, for example; engineering office for consultancy, station of geological research, economic research office, and university clinic (GSUSM, 2005). AFU locates in Tripoli (Capital of Libya), this location offers the university great opportunity to provide its services to large number of students, also it provides its services to different institutions including public and private organisations; such services including teaching, research, training, and consultancy (GSUSM, 2005). Additionally, from research point of view, not many other researchers have had access in the past to investigate issues enabling and affecting the quality services in AFU using TQM philosophy (investigate TQM phenomena). Thus AFU is typical as it is representative of other universities in Libya albeit others are smaller but they follow the same practices. Also, the two embedded case studies are present in all other universities; hence they are typical and similar as discussed by Yin (2003).

Based on the above discussion, AFU has considerable and substantial experience as the biggest university in Libya, while it manages and provides its services to a large number of populations. Also, AFU could present the other Libyan universities while they are

carrying the same structure, hierarchy, and administrative system. Thus, the lessons and knowledge that could be obtained from studying and investigating the issues enabling and affecting quality services provided by AFU would be vital and remarkable. Furthermore, logistically the accessibility to AFU as a case study university is undemanding, while the researcher was graduated from it. Relatively this makes it easy to contact targeted interview groups and manage for data collection, because friendship and social relationships (Libyan culture) plays an important role in dealing with such issues. Also, AFU is near to where the researcher lives, subsequently from time, efforts and cost constraints point of view is convenient.

Additionally, as given in figure 5.2 two embedded cases were selected. These cases are EED from Engineering Faculty (EF), and SSD from Literature Faculty (LF). Regardless of importance of each faculty and department in the university, the research considered that the services provided by each of them are equally important to the society. However, typically in any university there is a diversity of specialties (i.e. applied sciences and, arts and humanities). This research takes in consideration this diversity in the selection of embedded cases. Two different departments from two different fields reflect the difference in characteristics, requirements, needs, and types of services provided by each one. Also, may reflect different views about the concept of quality regarding their provided processes. Table 5.4 offers the key differences between the two embedded cases. Such differences are expected to enrich the data and information that could be obtained from both of them.

Table 5.4 Key differences between EED and SSD

EED (Embedded case 1)	SSD (Embedded case 2)
The field of work is applied science	The field of work is social science
Theoretical and practical aspects of curriculum are needed. Therefore, technical equipments and laboratories are required.	Mainly rely on theoretical aspects of its curriculum.
Services provided to the society are mainly to industry, and technical institutions.	Services provided to the society are mainly to social institutions.
The main employers of graduates are; general telecommunication company, general electrical company, and oil sector.	The main employers of graduates are; schools (preparatory and secondary), and Jails administration.

This will give opportunity to the researcher to compare the results obtained from both embedded cases. Furthermore, the researcher has selected these two embedded cases to secure a full understanding of quality issues that might reflect different experiences from the two main fields provided by the university (i.e. technical and humanities).

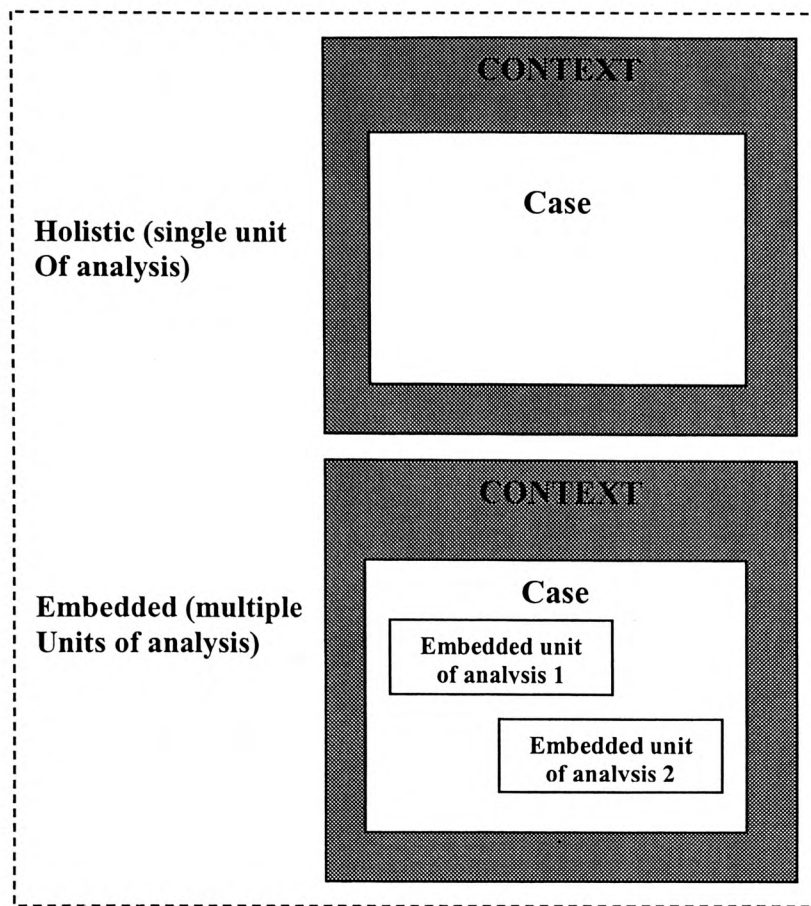


Figure 5.1 Basic types of designs for single case study (source adopted Yin (2003:40))

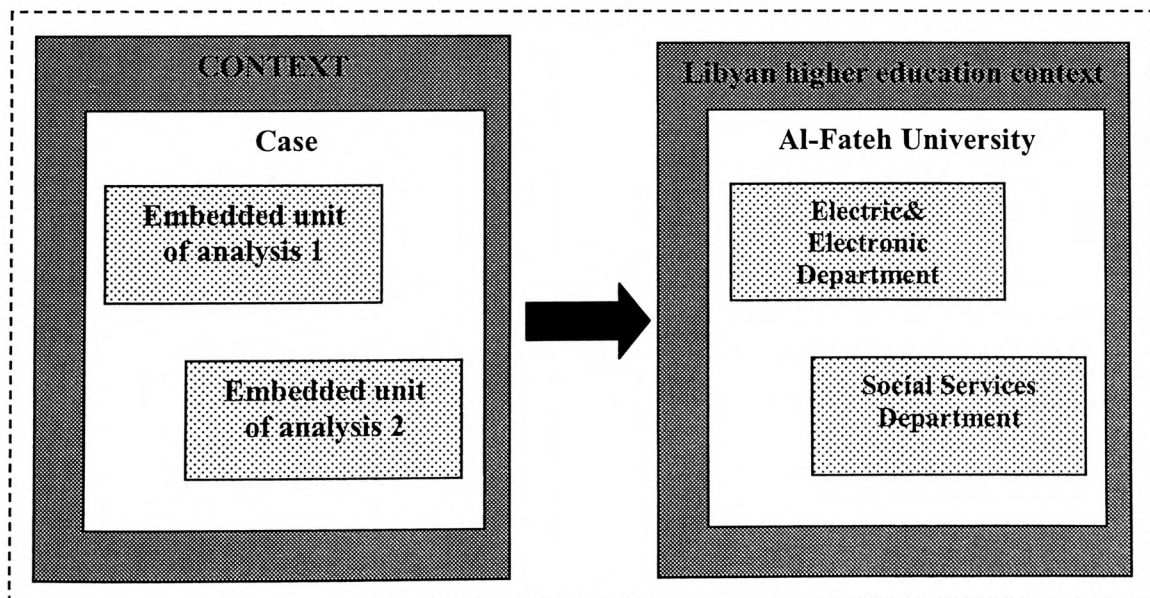


Figure 5.2 Single case study design adopted by the research (source adopted Yin (2003:40))

5.6.2 A Critique of Single Case Study

As stated by Yin (2003) in section 5.6.1.1 that a single case study is highly justifiable under certain conditions (the five rationales given above). Likewise, representative or typical single case study (Al-Fateh University) adopted in this research. Yin (2003) adds within the single case may still be incorporated subunits of analyses i.e. embedded design is developed. In addition, embedded cases can often add significant opportunities for extensive analysis, enhancing the insights into the single case. However, Yin (2003) states that if too much attention is given to these embedded, and if the larger, holistic aspects of the case being ignored, the case itself will have shifted its orientation and changed its nature.

Moreover, Interpretivists (likewise the researcher) believe that reality is not objectively determined, but is socially constructed (Saunders *et al*, 2003). The underlying assumption is that by placing people in their social contexts, there is greater opportunity to understand the perceptions they have of their own activities (Hussey and Hussey, 1997). By its nature, interpretivism promotes the value of qualitative data in pursuit of knowledge (Kaplan and Maxwell, 1994). In essence, this research paradigm is concerned with the uniqueness of a particular situation, contributing to the underlying pursuit of contextual depth (Myers, 1997). However, while interpretive research is recognised for its value in providing contextual depth, results are often criticised in terms of validity, reliability and the ability to generalise. These concerns are amplified in the single case scenario (Eisenhardt, 1989). Accordingly the discussion of the three terms is given below:

- ***Reliability for Qualitative Studies:*** refers to demonstrating that the operations of a study such as data collection procedures can be repeated, with the same findings (Yin, 2003). In order to achieve reliability in this research the researcher has tried to be consistent at all times so that if another researcher followed the same procedures similar results might be produced. The researcher has built a clear research design and has adopted an appropriate methodology that gives high reliability. In collecting the data consideration was given to the most strategy for the specific investigation. Accordingly, Yin (2003) points out that the general way of approaching the reliability problem is to make as many steps as operational as possible and to conduct research. This means that case study research procedures and techniques should be properly documented. Saunders *et al*. (2003) mentioned that reliability of interviews is also related to

bias. In this research the researcher tried to avoid the bias through improving his perception by building a good rapport or trust with the respondents, a good introduction of the study, emphasising the confidentiality, leaving participants to talk in the way they wanted.

Denzin (1970) states that multiple and independent methods should, if reaching the same conclusions, have greater reliability than a single methodological approach to a problem. This combination of methodologies in the study of the same phenomenon is known as triangulation. From an interpretive perspective, Eisenhardt (1989) recommends that the researcher start with a broad research question, establish systematic data collection and ensure case access to create strong triangulated measures. Qualitative research findings can be strengthened in this way by combining participant observation with interviews and documentary sources (Hammersley and Atkinson, 1983) in a single case. Likewise, findings of this research are strengthened by combining interviews with documentary (triangulation).

- ***Validity of Single Case Study:*** Yin (2003) appears to operate from realist ontology when he defends case method against attacks, especially in relation to the three forms of validity: construct validity, internal validity, and external validity. A key suggestion for dealing with construct validity is to use multiple sources of evidence and to establish a chain of evidence. For internal validity, Yin (2003) stresses the importance of building cases over time in order to eliminate alternative explanations. Internal validity is only a concern for causal case studies, in which an investigator wants to know whether event x led to event y; and for external validity he points out that case studies rely on analytic rather than statistical generalisations.

In terms of validation, qualitative research depends on the presentation of solid descriptive data, so that the researcher leads the reader to an understanding of the meaning of the experience under study (Stake, 1995). In essence, validation is an interpretive understanding of truth (Angen, 2000). Thus, triangulation is not a tool or a strategy of validation, but an alternative to validation in this context (Denzin and Lincoln, 2003). In a single case, data triangulation is particularly important in order to fortify validation in the absence of cross case comparison. Remenyi *et al* (1998) suggest using multiple data sources (likewise

this research), establishing an identifiable chain of evidence, and having a draft reviewed by the key informants to strengthen construct validity in this regard. On the other hand, to increase the level of validity, the researcher must provide supporting evidence that a measuring instrument does, in fact measure what it appears to measure (Saraph *et al*, 1989). Many validity standards were applied in the present research: during the personal interviews, a tape recorder was used (for a number of interviews) to reduce the risk of wrongly-interpreted answers during transcription of interviews. Also, a tape recorder is helpful to be able to double check the answers after the interview. Follow-up questions were also used during interviews, to make sure that the respondents understood the questions and to allow collecting more data.

Additionally, Easterby-smith *et al* (1991) pointed out that semi-structured interview validity refers to the extent to which the researcher has gained full access to the knowledge and meanings of informants. Saunders *et al* (2003) stated that the validity of in-depth semi-structured interviews is very high; this refers to the flexible and responsive interactions which are possible between interviewer and respondents allowing the meaning to be probed, the topic to be covered from a variety of angles and questions made clear to respondents. However, the validity during the semi-structured interviews in the case study may be lowered due to the fact that interview patterns were translated into Arabic language and accordingly answers were again re-translated into English during transcription. In the translation process words can unintentionally get the wrong meaning. To overcome this, the interviews patterns and transcription of results were given to two staff members in English language department-Literature Faculty (Al-Fateh University) to check and review the translation and edit the transcription. Also, the interview protocol questions were revised many times before the data collection and then piloted prior the actual interviews took place.

- **Generalisability:** refers to the extent to which the findings of the enquiry are more generally applicable outside the specifics of the situation studied (Robson, 1993). In qualitative terms, the research goal is to offer a case description (including data collection procedures) that would allow the reader to repeat the research process in another case (Kidder & Judd, 1986; Vaughan, 1992). Although a single case, such as adopted by this research, may not provide

sufficient evidence to make robust generalisations, it can establish the existence of a phenomenon (Van Maanen, 1988), which is adequate for the purposes of exploratory research (Remenyi *et al.*, 1998). Thus, a case can be generalisable to theoretical propositions (Yin, 1984; Saunders *et al* 2003), creating a distinction between analytical and statistical generalisability (Yin, 2003). Hence, there will be no attempt at statistical generalisability albeit new phenomena may be observed and hence contribution to existing knowledge, it will be then the role of further research to explore that phenomena elsewhere.

5.7 Data Collection Methods

There are several ways to elicit information stored in the minds of people, such as questionnaires, interviews, observations or archival materials (Easterby-Smith *et al* (2002); Hussey and Hussey (1997)). On the other hand, data collection methods depending on the adoption of research philosophy, research approach, research strategy, and the aim and objectives of the research (Yin, 2003). Generally, the most common methods used to collect data are questionnaires and interviews; this research predominantly uses interviews as a technique to gather in-depth knowledge from the two embedded case studies.

5.7.1 Interviews

To conduct a case study, the researcher has to identify the sources of evidence as described by (Denzin and Lincoln, 2003). Yin (1994) mentioned that there are six such sources: documents, archival records, interviews, direct observation, participation-observation, and physical artefacts. Accordingly, this research used multiple sources of evidence coming from two or more sources, and converging on the same set of findings. The two main sources of evidence used are interviews (in-depth semi-structured interviews from two embedded cases) and documents.

Interviews are considered one of valuable methods that could help a researcher to collect suitable and reliable data, which is related to the research question(s) or objectives. Interviews can be classified in to three types according to Saunders *et al* (2003):

1. *Structured interviews.*
2. *Semi-structured interviews.*
3. *Unstructured interviews.*

In structured interviews a researcher should prepare a set of questions specified in what is called 'interview schedule', where the same wording and order of questions are used (Kumar, 1999). In addition, researchers using this type of interviews could obtain uniform information, which assures the comparability of data. However, in unstructured interviews the interviewer formulates questions unexpectedly during an interview (Kumar, 1999). The interviewer in this situation needs to have a clear idea about the aspects that he wants to explore, since there are no determined questions to work through (Saunders *et al*, 2003). In addition, the interviewer in this type of interview feels free to talk about his beliefs related to the topic of the research; sometimes this kind of interaction is called non-directive. Nevertheless, since there are no pre-determined questions used by the interviewer in this type of interviews, the comparability of questions asked and responses obtained may become a problem (Kumar, 1999).

Despite the potential volubility that can both structure and unstructured interviews provide as research methods, semi-structured interview encompasses many of the advantages of both methods (Flick, 1998). For example, advantages associated with unstructured interviews such as flexibility in providing rich information through a large freedom given to the interviewer; also it provides in-depth information in the area of the researcher. On the other hand, semi-structured interviews can avoid many disadvantages encountered with unstructured interviews e.g. *"as the researcher gains experience during the interviews, the questions asked of respondents change, hence the type of information obtained from those who are interviewed at the beginning may be markedly different from that obtained from those interviewed towards the end"* (Kumar, 1999). This freedom can lead to unavoidable bias from the interviewer. Moreover, semi-structured interviews can provide uniform information similar to that provided by structured interviews without missing the flexibility and freedom encountered with unstructured interviews through a pre-determined set of questions prepared by the interviewer.

Generally, interview has many advantages and disadvantages as any other method. The main advantages are:

- It is a good way of exploring participants' subjective meanings, where the interviewer can tailor questions to the ongoing concerns and questions of the participants who can talk about things the interviewer might not have thought about, which sometimes can help the study (Yates, 2004).

- It allows the researcher to explore complexity, ambiguity, contradictions and processes, which might be encountered by the interviewees (Yates, 2004). Bell (1999) notes that when a respondent gives an unclear or incomplete answer, it is necessary to probe for additional information, and a restricted structured interview or questionnaire does not allow this.
- It gives the researcher the opportunity to explore and negotiate potential meanings of questions and answers as the interviewer explores the perspective of the respondent. Due to direct contact between the interviewer and interviewee, the interview allows the researcher to explain the purpose of the study and clarify any doubt or avoid any misunderstanding (Oppenheim, 1992). In supporting this view, Shaikh (1988) states that the typical response rate for a personal interview is about 95% percent, whereas for a mailed questionnaire it is between 20-40%.

However, the main disadvantages of the interview are:

- The whole process of conducting interviews can be expensive and time-consuming, especially if there is a large number of respondents to be interviewed, and in addition, the problem of the accessibility may arise (Hussey and Hussey, 1997).
- The interviewer may affect the validity and reliability of the questions as his/her mood could influence the interaction with the interviewee and, hence impact on the interview process.

5.7.2 Justification of the Data Collection Method (Semi-structured Interview) for this Research

Key data collection involved the use of semi-structured face-to-face key informant interviews. This technique was chosen since it is recognised as a powerful data collection tool that would allow the researcher to dictate both the topic and issues to be investigated whilst generating rich qualitative data regarding the phenomenon under investigation (Ghauri *et al.* 1995, Hussey & Hussey 1997, Cryer 2000, Jankowicz 2000, Sekaran 2003). This technique is described by Easterby-Smith *et al.* (2002) as being the most fundamental of all qualitative methods. This choice of data collection method reflects the researcher's epistemological stance in that knowledge creation is contextual, situational and interactional. Consequently, all data-collection tools were designed so as to be both flexible and sensitive to the specific dynamics of each interaction (Mason 1996). In accordance with Easterby-Smith *et al.* (2002) the primary purpose of the

interviews was to elicit understanding of the meanings interviewees attached to the issues and situations under analysis within contexts that were not highly structured in advance by the researcher. Similarly, the interviews were conducted so that every opportunity was available for the insights of the interviewees to be gained (Easterby-Smith *et al.* 2002). Fundamentally, and in accordance with Easterby-Smith *et al.* (2002), this technique was chosen since;

- *It was necessary to understand the constructs each interviewee used as a basis for their opinions and beliefs about the situation within which they found themselves and;*
- *The aim of each interview was to develop an understanding of each respondent's own world-view of these situations.*

Within these so-called 'elite interviews', the researcher was less concerned with the statistical analysis of a large number of responses than with probing the views of a smaller number of elite individuals in order to better understand the phenomenon under investigation (Anderson, 1990). In addition to what has been motioned in section 5.7.1, Easterby-Smith *et al.* (2002) advise, a completely unstructured non-directive approach was avoided. This technique would most likely have resulted in the interviewee having no clear picture in mind of what questions or issues the researcher was interested in, and the researcher having no clear understanding of what questions the interviewee was answering. Consequently, some structure for the interviews was needed. At the same time however, it was vital that the interview schedule be designed so that it did not limit responses to those themes already identified within the analytical framework. Accordingly, an acknowledged expert published in qualitative research Mason (2000) supporting the method used in this research mentioned that there are three characteristics of semi-structured interview:

- *A relatively informal discussion rather than formal question and answer format.*
- *No need for the researcher to have a structured list of questions, the researcher could have a range of topics, themes or issues to cover (likewise this research).*
- *The data are generated via the interaction.*

In this way the interview schedule allowed the researcher to successfully use existing theory and knowledge to guide the primary research. Furthermore, as advocated by O'Donnell and Cummins (1999) the analytical framework (based on literature review) guided the structure and content of these interviews – in this way it provided an agenda of areas to be covered within the interview. However, in accordance with O'Donnell and Cummins (1999), the primary focus of the interviews was to extract subjects' own understanding of the phenomenon under investigation from the interviewees' own point of view.

Based on the above discussion, the selection of semi-structured interviews as the main data collection tool for this research has also been made by the researcher in the light of the advantages of the interviews mentioned in section 5.7.1 (Yates, 2004; Easterby-Smith *et al*, 2002; Bell, 1999). Additionally, many Arab researchers, for example Mousa (2005), Al-Bahusseini (2000), and Al-Faleh (1987) used semi-structure interviews to conduct empirical work. Those researchers found that such interviews were very successful approach in Arab organisations where people prefer to talk rather than to complete a questionnaire. Mousa (2005) points out that people in many organisations in Libya have been bothered by questionnaires which predispose them to be hostile to such approaches, and the response rate is very low compared with direct interviews. Therefore, the interview schedule was designed to give interviewees every opportunity to fully articulate and explain their own experiences from their own perspective and standpoint thereby supporting the inductive nature of the study. Broad open questions were used in order to counter the provision of carefully rehearsed answers by interviewees and instead result in the provision of rich qualitative responses from them since the interview was designed to mimic the ebb and flow of natural conversation (Anderson 1990, Hussey & Hussey 1997). This technique's strength ultimately relied upon the careful design and selection of the agenda that made up the interview schedule and which subsequently formed the basis of the interviews.

5.8 The Target Interviewees (Research Population)

Interviews are methods of collecting data in which selected participants are asked questions in order to find out what they do, think or feel (Hussey and Hussey, 1997). For this research, the most reliable data will come from people concerned about quality issues in the two embedded case studies through using interview protocol based on TQM philosophy (i.e. analytical framework). Those people (target interviewees) from both cases include; 2 faculty heads, 2 department heads, 10 faculty members, 3 support staff, 28 students, and 5 employers. Therefore, the total interviewees are 50. Table 5.5 presents the details of those interviewees. Figure 5.3 illustrates the interview methodology in this research. It shows the context of the study which represented by the Libyan higher education focusing on public universities. Al-Fateh University has been selected as a single case study. The two embedded cases (i.e. EED and SSD) are two departments selected from two faculties which are engineering faculty and literature faculty respectively. Also, it illustrates the target interviewees from both embedded

cases, and the data collected from both interviews and documents will be analysed which eventually provides the research findings.

Table 5.5 Interviewee groups from both embedded case studies

Embedded case study-I (EED)			Embedded case study-II (SSD)		
Interviewee	Numbers	Title	Interviewee	Numbers	Title
SL1	1	Faculty Head (EF)*	SL1	1	Faculty Head (LF)**
SL2	1	Department Head	SL2	1	Department Head
Faculties	5	Academic Staff (M)	Faculties	5	Academic Staff (3M)&(2F)
Support Staff	2	Support Staff (M)	Support Staff	1	Support Staff (M)
Students	16	Students (7F)&(9M)	Students	12	Students (11F)&(1M)
Employers	3	GTC, GEC, and OS	Employers	2	Schools include (preparatory and secondary), Minister of Interior responsible of JA
Total	28		Total	22	

* Head of Engineering Faculty (HoEF) (Al-Fateh University)

- GTC (General Telecommunication Company)
- GEC (General Electrical Company)
- OS (Oil Sector)

Head of training administration interviewed in the three mentioned employers.

M=Male.

F=Female.

** Head of Literature Faculty (HoLF) (Al-Fateh University)

Two schools (1 preparatory and 1 secondary)-Head teachers interviewed.

-JA (Jails Administration)-senior administrator interviewed.

M=Male.

F=Female.

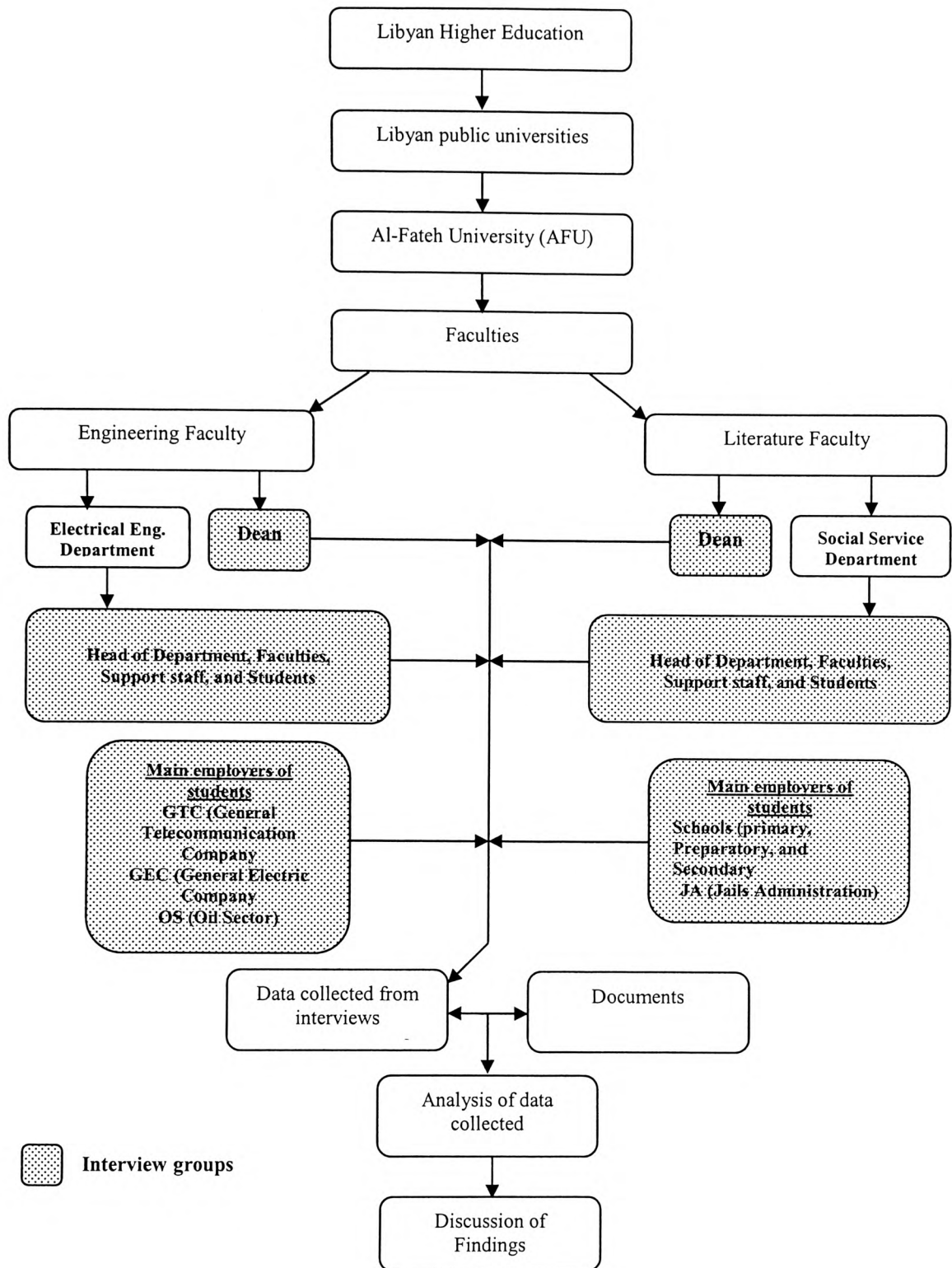


Figure 5.3 Interview methodology developed for this research based on Yin (2003) embedded cases design

5.9 Pilot Study

Many experts in research methodology agree that at some stage in the research design process, questions provided by the researcher either through questionnaires or/and interviews should be subjected to preliminary test (Hussey and Hussey, 1997; Sekaran, 2003; Yin, 2003). This is known as piloting. Hoinville and Jowell (1977) pointed out that such pilot study is extremely useful in refining the wording, ordering, layout, and filtering the questions. In addition, Denzin and Lincoln (2000) mentioned that the pilot study allows the researcher to focus on particular areas that may have been unclear previously. Brenner *et al* (1985) stated that the pilot study is carried out to ascertain the validity and credibility of the interview protocol questions. Hence, the researcher believes that a pilot study is very important to make sure that the questions of interviews make sense to the respondents, and to guess the suitable time for each interview. Furthermore, the researcher believes that, a pilot study can help to get more accurate questions related to the research problem that can be used when conducting the real case studies.

For the purpose of this research, piloting the interview protocol questions was undertaken twice. In each pilot study a draft of interview protocol questions was given to the interviewees. The first piloting was conducted in UK by interviewing five Libyan PhD students who work as academic staff members in various Libyan HEIs. The second piloting was occurred on the real case study where six staff members were interviewed. The purpose of such piloting is to establish whether the interview questions were understandable to the interviewees and comprehensive enough to cover the research problem. Also, the piloting will help to know if those questions are sufficient to obtain rich data and valuable information to fulfil the aim and objectives of the research. The feedback from interviewees from both pilot studies was very helpful and their comments were taken in consideration. Accordingly, some changes were made for example, language adjustments, re-phrasing some questions in order to be more clear and understandable, and re-arrange some questions and put them under certain themes.

5.10 Gathering and Analysing Data

The researcher started the actual data collection during the period from October to December 2006, through semi-structure interviews in both embedded case studies. The time allocated for each interview fluctuated from case to case, and in general, the average time was about forty five minutes to one hour and a half. Twenty-eight interviews were conducted at the first embedded case (i.e. EED) and twenty-two

interviews were undertaken at the second embedded case (i.e. SSD) including the employers of their graduates (see table 5.5).

Furthermore, Kvale (1996) states that “To the common question, ‘how many interview subjects do I need?’ the answer is simply, ‘interview as many subjects as necessary to find out what you need to know’”. Additionally, Taylor and Bogdan (1984) stated that qualitative interviewing is flexible and before commencing the study neither the number nor the type of participants needs to be specified. Based on that the researcher started interviewing without knowing how many participants would be interviewed and continued until he felt that most answers had become repetitive, and the information collected was enough to achieve the research aim and objectives. On the other hand, to reduce the problems that accompany the interview protocol, such as "bias, poor recall, and poor inaccurate articulation", based on Yin, (1994), the researcher strengthened (triangulated) the information from interviews with that from other sources e.g. documents.

All the interviews were conducted in the Arabic language, the researcher’s mother tongue, which enabled the researcher to understand each word and expression during the interview. The researcher took notes during each interview include the recorded interviews, so that as far as possible vital points were not missed, and copies of any documentary evidence which seemed relevant were usually obtained at the same time. Despite its importance, a tape recorder was used to record some interviews, however other respondents did not like recording of their interviews. It may be due to the cultural considerations. The researcher followed the guidance of Easterby-Smith *et al* (2002), in leaving enough time between the interviews to allow sufficient time to write notes and think about data, and possibly to explore some issues raised. Each interview was later converted into some forms of written record, usually on the same day. This discipline is supported by many researchers such as Stake, (1995) and Yin, (1994).

Moreover, interviewees were very generous and helpful as they gave the researcher sufficient time for the interview. Furthermore, they gave the researcher a chance to come back at any time to enquire about their answers or about any other information. This gave the researcher confidence in the accuracy of the interview process and increased the reliability of the research process. Although, it is difficult to evaluate the honesty and accuracy of the responses of interviewees, the overall impression gained was that the respondents were generally friendly, open, and gave generously of their time and cooperation, and most seemed interested in the research.

Saunders, *et al* (2003) mentioned that there is not a standardised approach to the analysis of qualitative data, phenomenologists, for instance, resist categorising or coding their data, preferring to work from the transcripts of interviews. Saunders *et al.* (2003) indicated that using the transcripts or notes of qualitative interviews or observations by thoroughly reading and re-reading them is one approach to analysing this type of data. In the same context Taylor and Bogdan (1984) stated that all researchers develop their own ways of analysing qualitative data. Accordingly, the approach adopted in this study involves classing the mass of qualitative data collected based on the categories (themes) provided by the interview protocol (tables A.11.1-A.11.10 in appendix 2) where itself based on analytical framework (figure 3.1). Such framework was founded on literature review. This allows the researcher to rearrange and analyse the data systematically and rigorously. Flick (1998) states that "*we can distinguish two basic strategies in handling texts: on the one hand the coding of the material with the aim of categorising and/or theory development; and on the other the more or less strictly sequential analysis of the text aiming at reconstructing the structure of the text of the case*". Yin (2003) advocated that, the overall goal in data analysis is to treat the evidence fairly, produce compelling analytic conclusions and rule out alternative interpretations.

Therefore, regarding the above discussions, and based on what has been stated by Collis and Hussey (2003) that the responses were analysed and then categorised into distinct groupings. Keeping the aim and objectives of this study at the front of the mind, the researcher converted the interviews' responses into some form of written record, after that the data collected were grouped and placed according to indicated themes. It was not necessary to produce word-for-word transcriptions of the interviews as the data analysis techniques selected did not require this. The researcher was satisfied that the generalisations arising from data collected were sufficiently robust to stand the analysis of existing theories. Other sources of data collection are used included documents from embedded cases and from the university administration departments as well as reviewing other previous researchers' reports and government papers. However, there is a paucity of documents within the university and clarification in triangulation of evidence was not always available. This is discussed as a limitation to the research in section 7.14.

5.11 Summary of Chapter 5

This chapter has introduced the methodology applied to pursue the research aim and objectives of the study. It has considered the philosophical paradigm to adopt and come out in favour of a phenomenological tradition, and discussed whether to use a quantitative or qualitative approach. It is decided to adopt qualitative approach while it gives to the researcher opportunity to understand and explore the phenomena under investigation in their natural environment. A single case study is adopted as a research approach. The single case adopted is considered as a representative (typical) case where such a single case is examined as two embedded cases. A critique of such single case in terms of validity, reliability and the ability to generalise was provided. The decision to use a qualitative methodology and to use the semi-structured interview technique has been fully rationalised by reference to the nature of the objectives to be realised and the character of the research population involved. Piloting the interview protocol and its importance was also given. Clear information regarding how the data collected and analysed has also been given. The next chapter discusses the findings that emerged from collected data.

CHAPTER 6

Case Study Findings

6.1 Introduction

The main aim of this chapter is to present the major findings obtained from data collection about the two embedded case studies. This data were produced from the in-depth semi-structured interviews (example transcript is given in appendix 4) in addition to other sources of data relevant to the research (discussed in chapter 7), all of which were used in order to achieve the research aim and objectives. The rationale for choosing in-depth semi-structured interviews as the main tool to collect the data was given in the methodology chapter. As discussed in that chapter, the researcher carried out semi-structured face-to-face interviews totally with 28 respondents in embedded case study-I (EED), and 22 respondents in embedded case study-II (SSD). This includes senior leaders, faculty members, support staff, students, and employers. The systematic analytical technique process of analysing the collected data was also discussed in the methodology chapter.

The data collected is based on the themes (key TQM principles) provided by the analytical framework. This way offers a more easy and robust process to collect and analyse the data while the collected data is given under each related theme. The findings will be presented in relation to the aim and objectives of the research.

6.2 Interview Results

The interviews were conducted during the period of October to December (2006). The time allocated for each interview fluctuated from case to case, and in general, the typical time was between forty five minutes to one hour and half. In order to present the data from interviews, the following terminology and concepts are used in this research and was explained in more detail in chapter 5 when discussing the methodology:

1. Two embedded case studies were used in this research
 - Electric and Electronic Department (EED)/Engineering faculty at Al-Fateh University as embedded case study-I
 - Social Service Department (SSD)/ Literature Faculty at Al-Fateh University as embedded case study-II
2. According to MBNQA (2004) the term “senior leader(s) (SL)” refers to those with the main responsibility for managing the overall organisation. Senior leaders might include administrators, department heads, and/or faculty heads. In this research, SL1 will be used for faculty heads and SL2 will be used for

department heads. In addition, the “Faculty Member” refers to the organisation’s permanent, temporary, and part-time personnel, as well as any contract employees supervised by the organisation (MBNQA, 2004). In this research, Faculty Member will be referred to an academic staff who provides e.g. lectures, tutorial, practical side (e.g. lab experiments, field studies), consultancy, research, and supervision (e.g. theses/dissertation include; bachelor, Diploma, Master, and PhD. degree). Furthermore, in this research “Support staff” refers to personnel who are responsible to provide and prepare experiments in technical labs and workshops. Also, support staff who help students in tutorial (e.g. solving problems) and field studies by offering advices and help faculty members in correcting students’ examination papers as well as in some administrative work. Moreover, a number of students were interviewed from both embedded case studies.

3. The interviews were also conducted with the main employers of graduates of both embedded case studies, those employers are given below:
 - For embedded case study-I (EED), the main employers are: General Telecommunication Company (GTC), General Electrical Company (GEC), and Oil Sector (OS).
 - For embedded case study-II (SSD), the main employers are: Schools (e.g. preparatory and secondary schools), and Ministry of Interior as responsible for Jails Administration (JA).

Figure 5.3 (chapter 5) illustrates the interview methodology, it shows the context of the study which represented by the Libyan higher education focusing on public universities. Al-Fateh University has been selected from public universities as a single case study. Also, two embedded case studies research were selected include EED and SSD from Engineering Faculty and Literature Faculty respectively. Also figure 5.3 shows the interview groups and the related data collection methods for the research. Additionally, table 5.5 provides the numbers of interviewee groups at different levels in both embedded case studies (EED and SSD).

Semi-structured interview is the main data collected method used in this research, in this context Mason (2000) stated three characteristics of semi-structured interview:

- *A relatively informal discussion rather than formal question and answer format.*
- *No need for the researcher to have a structured list of questions, the researcher could have a range of topics, themes or issues to cover (likewise this research).*
- *The data are generated via the interaction.*

Based on the above characteristics of semi-structured interview, it should be noted that in this research the data obtained by interviews are not literally or verbatim to the issues or questions given under each theme (principle) in the analytical framework (chapter 3). However, the following sections will provide the research findings under each related theme of the analytical framework.

6.2.1 Leadership

The leadership style in the Libyan universities has been passed through five styles (see section 4.4) named syncretism system, democratic system, students' administration system, dual administration system, and one public committee system (Alfnish *et al*, 1998).

It should be noted that when SL1 mentions a leadership he/they mean the "top management" of the university, while SL2 means the SL1 (faculty head). However, faculty members, support staff, and student when they mention leadership, they mean SL2.

Interviews with SL1 (EF and LF) revealed that there is awareness among the top management of the university as well as the public committee of Libyan HE that they should learn from previous problems and employ the results to improve the future. Also, there is more understanding from top management than before regarding the importance of improving the quality of different services provided by the Libyan HEIs. However, those leaders added that leaders' authority or empowerment in any Libyan organisations' administration including the university administration is strongly influenced by the Libyan culture (social or/and political). In this context one senior leader stated:

"The students' performance regulations are suspended; this means students who should leave university because of their low performance, now they can stay for unlimited time what ever their grade. This leads to an accumulation of students in lecture halls and laboratories. Consequently, the educational processes are negatively impacted".

Both senior leaders added that the lack of leadership training programmes for top management at all levels in the university has impacted negatively on the role of existing leaders. Respondents from faculty members and support staff in both embedded case studies claimed that senior leaders can learn from previous problems while in their positions (period of two years), however one faculty member states that when new senior leader come, it is possible that the previous problems are occur again.

He adds that new senior leader started to tackle the same problems again; also the absence of a support team (e.g. secretary, qualified employees) increases the gap of such lack of integration. Also, the absence of effective documentation of the problems and their solutions that the department faced is another obstacle. Faculty members and support staff in both embedded cases stated that continuous change (sometimes rapid change) of department head makes him unable to deal with many issues specifically those that need quick solutions or decisions.

Regarding the issue that if the university senior leaders are able to carry their responsibility towards removing barriers and obstacles that hamper or prevent staff to do their job effectively and efficiently. Two respondents SL1 and SL2 mentioned that the leader's specialty (same area of expertise) both at the level of faculty and university is important for understanding the needs of lower levels. It is easy to understand and communicate the needs and difficulties facing the department or faculty if the leader has the same area of specialty. However, if he/she is from different area it is not easy to explain your needs and find common understanding with him/her. In this context one senior leader said:

"If for example my field is engineering and the university senior leader's field is humanities, he find difficulty to understand my problems and needs, because he is not familiar with what is going on in my field".

In addition, faculty members and support staff respond to the same point that the ability of leaders in removing barriers depending on the leader's experience in the academic field. They added that most of the old generations of faculty members (who become a department head) are more able to deal with different academic and administrative issues than the new generation of faculty members. They further added that despite absence of leadership training programmes, old generation are improved themselves by time. Accordingly, they develop their leadership skills and become more capable to manage departments or/and faculties. A number of faculty members pointed out that there is no particular mechanism adopted by department or faculty board in removing barriers and obstacles facing staff members. In this respect one faculty member stated:

"Some obstacles could be removed through individual efforts from faculty members or department heads, as you see, removing obstacles or barriers is not taking place through or based on specific or particular mechanism or procedure".

Same faculty members further added that senior leaders encountered two main problems towards removing obstacles and barriers facing staff members. The first problem is the absence of independent budget for departments and faculties. The second problem is the administrative bureaucracy facing most of processes provided by both embedded case studies.

There is an agreement among all respondents including senior leaders, faculty members, and support staff in both embedded cases that the style of the Libyan HEIs leadership emphasises the notion of train and coach rather than superior, while such style reflects the notion of teamwork through public committees. Those respondents also claimed that, such leadership reflects the notion of democracy, since there is a representative of each of all university segments in the public committee (university leadership, see figure 4.2) (i.e. faculty members and support staff, students, and employees). They further added that this gives opportunity to all members of the committee to discuss, exchange information, learn from each other, and share decision-making. In addition, the role of the committee head is organiser rather than superior.

Interviews with faculty members and support staff revealed that the role of senior administrators towards creating goals, values and systems that lead to continuous improvement in both embedded case studies is limited. Faculty members and support staff added that leaders are different in their abilities, skills, visions, ambitions and capabilities towards improving the processes provided by department or faculty. In addition, few leaders offer some plans towards improving some processes and struggling to provide the needs to accomplish such plans. They added however, the bureaucracy delays and hampers most of these efforts. In this esteem one of senior leader said:

“The efforts taken by faculty’s administrators to create values are limited. Therefore, the department started to create values, for example establishing some links with employers and discuss with them different issues regarding the level of graduates and course contents. In my opinion such efforts are still under individual bases, I believe that creating values should be launched from strategic plan at the level of university in order to align all those values with faculties’ and departments’ values.”

Most of respondents from faculty members and support staff in both embedded case studies agree that senior leaders are able to examine the effective use of resources available. They added that despite shortage of facilities, senior leaders tried to facilitate many requirements needed for educational and administrative processes. Those

respondents added that this could be achieved either through faculty board or through contacts with other organisations. For example one of the senior leaders started to establish a small library inside the department by collecting some books to help faculty members, support staff and students who involved in the final project stage in order to fulfil their needs. Faculty members and support staff in SSD added that this attempt from a senior leader comes from the main faculty's (LF) inadequate library of text books and required references related to the curricula provided by the department. In addition, other organisations can help e.g. in adopting some students' final projects, provide some equipment, and help in field study training. In contrast, one faculty member states:

"Indeed there are reasonable resources, but administrators did not employ those resources effectively and efficiently, in my opinion most of senior leaders either at the level of faculty or/and department concern about secondary issues rather than the important ones. For example, they concern about new furniture for offices and not much about e.g. modernise libraries or improve scientific research."

The majority of respondents including faculty members and support staff from both embedded case studies pointed out that most of senior leaders are consider ethical dimensions in their behaviour. In this context, one faculty member said:

"In my perspective it depends on the leader's personal mode, if there is a personal problem with such leader this might reflect on his behaviour against you, according to my experience most of such leaders are from who have less academic and management experience".

On the other hand, one of the senior leaders (SL1) stated that some faculty members are not treating students equally. He adds that those members are practicing favouritism or bias among students (cultural dimension).

Most of the respondents including faculty members and support staff in both embedded cases agreed that the most senior leaders listen and discuss the issues regarding educational and administrative processes with their staff. Those respondents added that in many occasions department leaders discuss several issues with staff members (usually old generation) and listen to their opinions. On the other hand, one faculty member indicates that some times department head does not listen to the feedback from staff or students regarding some decisions. The same faculty member adds however, in his opinion, the senior leaders' decisions are often changed in response to criticism and complains from either students or staff.

6.2.2 Customer Focus

Regarding the importance of students' views (survey), there is awareness among all senior leaders as well as faculty members and support staff in both embedded cases regarding the value of students' survey in enhancing different services including educational processes in general and teaching and learning in particular. In addition, they believe that the survey should include faculty members, support staff, employees and employers. However, one senior leader (SL1) stated that at the level of faculty (LF), the students' survey has been applied or distributed only one time and then never happened again. The same SL1 mentions that it was infrequently used in some departments. Nevertheless, he adds it was found unsuccessful since most of the students do not answer the questions properly. Also, the students are fear to answer such survey, because there is a lack of awareness among them about the importance of students' survey role. In addition, senior leader (SL2) and one faculty member pointed out that at the level of the department the students' survey was distributed only once. In this respect, the senior leader said:

"The results of such survey were found embarrassment, to be honest it was found difficult to face the related people like senior leaders, faculty members, and support staff with such results due to collegueship and friendship [Libyan social culture] where criticism is difficult to be accepted in this case and at such levels. Accordingly, we can't repeat such survey again"

Additionally, one senior leader (SL1) mentions that Literature Faculty (LF) creates a box where students can complain or claim e.g. against faculty members, support staff, educational programme or/and services processes. He adds that even this way was found ineffective due to the same reason mentioned above (students fear to express their opinions). About the same issue, students in both embedded case studies have no information regarding students' survey. Students from EED mentioned that there is no specific mechanism in the department for listening to the students. Students in both embedded case studies mentioned that either the direct contact with senior leaders or through a written request to the department board are the main ways to explain the student's individual problem. Students added however, despite long time that such ways could take; they are only the current ways available to listen to students. On the other hand, one support staff points out that students are divided in groups related to their academic levels and each group is responsible by one faculty member or support staff. In this case, the responsibility of each one of them is to guide and advice his/her

students and make clear for each student the academic regulations from different aspects related to the student's academic life. Those aspects include registration, prerequisite subjects, grade problems and how students can recover them. Nevertheless, this member of support staff adds that many students do not follow the instructions and advices given by their advisers. This causes problems for students either in present or in next semesters.

Also, respondents from faculty members and support staff in both embedded cases mentioned that the senior leaders SL2 are listening to their opinions and understand their needs, while all department's faculty members and support staff are members in the department board. In this context a female faculty member (SSD) stated:

“We [female members] found that department head was very helpful and understands our social circumstances, while we have to do house work [Libyan culture], in addition to our job in the department as lecturers. The department head offers us a suitable time table where both works [housework and academic work] could be managed properly.”

Another interviewee (female) supported that statement also. Nevertheless, those two faculty members added that due to the limited authorities and financial resources of the department, many requirement and needs of academic staff cannot be achieved.

Concerning to what extent the case studies know the needs of labour market and how they attempts to match their outputs with the needs of such market. The related documents and research demonstrated that the Libyan labour market has limited ability to contain or hold the Libyan HE outputs. Additionally, interviews revealed that there is agreement among senior leaders (SL1 and SL2) in both embedded cases that there is no attempts so far regarding investigate or address the needs of labour market. Although, they believe that studying and investigating the labour market needs is important and would help and enhance HEIs to improve and link their activities in more consistent way with the society's needs. On the other hand, interviews revealed that there has been no approach or method adopted by both embedded case studies towards listening to the views and identify the needs of their stakeholders including employers of their graduates. However, the Engineering Faculty (EF) and through Engineering Research and Consultancy Office offers services to different institutions in the society. Most of these services provided are in the form of consultancy. Also all faculty members and staff of the engineering faculty are entitled to contribute in such consultancy.

Furthermore, interviews with students (SSD) revealed that they believe that there is a difficulty to find a job as a “social specialist” in related institutions. Through their field

training, students found that the people who occupy the position of “social specialist” in some institutions are not educated or graduated from university or equivalent institution in this field. The students commented that those people are employed through personal or/and social relationships (i.e. cultural aspect). In this esteem, one student states:

“I can’t understand that social specialists in many social institutions are not qualified, and I am graduated from university I can’t find job, simply because I have no one of my relatives or friends who has authority in such institutions to help me get a job”

The students further added that many of them work voluntarily (no money) with social institutions for several months. Within this time the institutions build an idea about the student and they may offer him/her a job or they may not.

About the issue “to what extent both embedded case studies provide vital support to their academic activities through e.g. libraries, laboratories, and different other facilities related to such activities. Also to what extent the effectiveness of these facilities matching the expectation of their academic staff, researchers and students”. The interviewees from both embedded cases reported that there are weaknesses encountered the infrastructure both on the level of faculties and departments. Buildings and other utilities need to be renewed and extended to face the increases in student numbers. These buildings and utilities including lecture halls, laboratories, libraries, offices and entertainment places. In addition, there is a lack of facilities for people who have special needs. In this context, one senior leader (SL1) said:

“Many of the faculty’s laboratories and workshops are thirty four years old and need to be renewed in addition to the buildings including lecture halls and offices. Many of these assets were not renewed or extended in presence of increases in students’ numbers. Indeed, those buildings are designed long time ago for few hundreds of students, now the number of students in this faculty is ten thousands with nearly same facilities.”

Additionally, there is a deficiency in both libraries of the two faculties (i.e. EF and LF); such deficient encompasses many aspects including enough places, text books, periods, journals and internet access. Both senior leaders (SL1) stated that this leads lecturers to rely only on one or two text books as references in each of their provided subjects. Also, students rely mainly on the professor’s notes which limited their knowledge and become unable to deal with the required knowledge from the main sources. Those senior leaders further added that this impacts negatively on students’ job development such as to be as good researchers. Respondents from students (EED) stated that they are facing difficulties in their studying, because they are using two languages Arabic and English.

Class lectures are mainly provided in Arabic. However, only few concepts, problems and definitions are offered in English. Students added that text books, sheets or handouts, and lectures' notes are given in English. Students further comment that they found themselves scattered and despite they get better understanding in Arabic they have to deal with English text books and other English articles to fulfil their knowledge. Also, students stated that their English language is weak and the English courses offered by the EF are not matching their needs to cope with the subjects provided.

There is agreement among a number of faculty members in both embedded cases that the general level of postgraduate studies are below the requirements including the level of research provided by such studies is low. Also, most of postgraduate pieces of research do not match the society's needs, however it is only for obtaining a degree. In addition, postgraduate studies come across poor facilities include the availability of periods, journals, books, internet access and required equipment for applied sciences. Interviews with senior leaders from both embedded case studies support these findings.

6.2.3 Teamwork

Interviews about this theme revealed that the faculty board, department board, committees and a group of students working together are the main known forms of teamwork in both embedded case studies. Also, interviews showed that the notion of cross-functional teams, where members of such teams come from different units of the organisation is not applied in both embedded case studies. However, under this notion, the university board or faculty board might be considered as cross-functional teams, since they consist of members from different faculties or departments respectively. Based on this context the concept that teamwork embraces and embeds the notion of open communication and learning environment is limited in both embedded case studies.

There is agreement among the respondents including senior leaders, faculty members, and support staff in both embedded case studies that members of teamwork (i.e. members of faculty board, members of department board and members of different committees) are effectively contributed in decision-making. Also, respondents from faculty members and support staff in both embedded case studies as members of department board emphasis that they are entitled to contribute in decision-making. In this context, one faculty member said:

“All academic staff members in the department, as members of the department board, have equal opportunity to discuss openly and freely any sort of issues related to the department and have their own rights to discuss and contribute in any decision-making process.”

Committees are the most common forms of teamwork used in both embedded case studies to deal with different organisational and educational processes. Those committees including; committees for up dating and assessing curriculum, committees to manage exams, and committees for evaluating and addressing technical offers such a laboratories' equipment and devices. Also, there are committees for managing conferences and other scientific activities. Additionally, senior leaders from both embedded cases stressed that the department board works effectively towards removing barriers that could hamper continuous improvement processes. On the other hand, the efforts towards removing barriers faced with bureaucracy in many occasions.

Furthermore, two senior leaders (SL1) and (SL2) as well as faculty members and support staff in both embedded case studies are agreed that there are no training programmes offered to any form of teams to improve teamwork members' skills. These skills include interpersonal communication, cross-training, co-operation, and group decision-making. However, they claimed that some aspects of these skills are possessed by their 'teamwork' members.

There is a general agreement among respondents including senior leaders and faculty members in both embedded cases that working within teamwork for instance in a form of committees or groups of students is vital, since teamwork members exchange information and learn from each other. On the other hand, respondents from both embedded cases including senior leaders, faculty members and support staff respond differently regarding the importance of encouraging their students to work in teams. A number of faculty members in EED and through their experience, they believe that working students in “teams” will lead teamwork members to rely on only one member. Therefore, they commented that “it was found unfair for that member who did all or most of the job, since all members will obtain the same mark”. Also, it was found difficult to assess each member fairly in such case. In this respect, one faculty members states that:

“I found it unfair to give all members of the group who provide e.g. experimental report same mark, while I know that only one or two students did all the work. From this point it is difficult to assess them fairly”

Furthermore, interviews with students from EED demonstrated that the students' opinion regarding the same point is compatible with the faculties' opinion given above. Additionally, senior leader (SL2) mentioned that students in EED are encouraged to work in teams, for instance in mini-projects at the end of each semester or/and in final projects. Regarding this issue SL2 further said:

"There are two main reasons behind encouraging our students to work in teams (groups). First, the increases of student numbers in the department. Second, the department encountered shortage in equipments and other technical facilities."

Also, the same SL2 agrees with the same faculty member's opinion given above about the work is made by one or two members of students' team. Though, SL2 comments that there is no alternative way to cope with increases in students' number and offer them the minimum requirements of curriculum.

Nevertheless, respondents including SL2 and faculty members in SSD believe to encourage their students to work in teams. SL2 states that working in groups is considered one of the important aspects of our area. The senior leader adds that students [mainly females in SSD] who live in the same area are encouraged to create teams and investigate issues related to their study. One faculty member points out that the students in SSD are encouraged to work within teams in many educational activities such as final projects, assays, seminars, and field training. The faculty member adds that the evaluation takes place at the level of teams rather than at the level of individuals.

6.2.4 Open Communication

Concerning this theme, the interviews revealed that there is no particular approach or/and indicators adopted by both embedded case studies in assessing the effectiveness of the communications processes. Also, there is a general agreement among all respondents that communication processes in both embedded cases are unsatisfactory and described as ineffective. Accordingly, they commented that in general there is a lack of clear shared understanding of objectives stated by both embedded cases.

Furthermore, all interviewees reported that the communication means used in both embedded case studies are traditional means. Such means including; face-to-face meetings, letters, pigeonholes, phones, notes board, and announcements. Face-to-face meetings take place in faculty or department boards, committees, and with students in case to discuss with them general issue(s). For example, EF Newsletter (2006) indicated that induction session held for new students and provides them with faculty's

regulations and other related issues. Additionally, letter, pigeonholes, and phones are used mainly to communicate faculty members, support staff and employees. Finally, notes board and announcements are mainly used to communicate to students. Respondents from students in both case studies stated that the departments and faculties used a lot of announcements which make it difficult to follow them properly. They added that some announcements are without dates and some times many of them are found ruptured or tattered. Additionally, there is an absence of internet access in both case studies.

Engineering Faculty recently used newsletter as another mean of communication. However, one faculty member states:

“The weaknesses of communication in the department and the absence of new technology, such as internet, make many issues inaccessible. This hampers the communication links with administration, colleagues and students, which eventually affect educational and administrative processes”.

In the same respect, there is agreement among many faculty members in both embedded case studies that department's meetings are not occurred in regular periods. One faculty member (EED) mentions that most staff members are not attending such meetings. One faculty member (SSD) cited another communication aspect encountered academic staff members in the department, in this esteem, he said:

“There is a communication gap between old generation and new generation of academic staff in the department, because in my opinion new generation staff believe that they are the same as old generation staff while they are holding the same degree. However, new generation should appreciate old generation staff because of their long experience and they were their teachers, I believe such gap should not be exist if there is a good communication processes in the department”. [The same statement is supported by SL2].

Another faculty member from SSD points out that the lack of effective communication processes in the department leads to delay in removing barriers facing academic staff and students to realise their objectives.

Respondents from students in both embedded case studies indicated that the communication with lecturers depends on the lecturer's personality and mode. The students added that some of them are co-operative, listen to students, and disciplinary, however some of them not. Number of students (EED) mentioned that there is a lack of co-ordination and communication between lecturers who teach same course to different groups of students. Students (EED) added claimed that they found major differences in

the material of the same provided subject. On the other hand, senior leaders stated that it is not easy to communicate and find common understanding with the university's top-management if they are from different area of expertise (see section 6.2.1).

6.2.5 Education and Training

Interviews about this theme revealed that there is a general agreement among senior leaders, faculty members and support staff that there are no training programmes offered by both embedded case studies to their staff. In addition, there is no evidence that the university provided any plans for such training programmes. Also, senior leaders, faculty members and support staff in both embedded case studies stated that they did not given or attend any training programme. For example, in teaching methods, course design, evaluating or/and assessing educational programmes, assessing students performance, and using quality tools and techniques to improve their jobs. However, in both embedded cases senior leaders, faculty members and support staff are agreed that such programmes are crucial and must be offered by the university in regular bases. Also, they believe that providing such programmes will enhance the quality improvement of different educational processes.

Additionally, the interviews showed that there is awareness among senior leaders in both embedded cases that their staff is in need for training to improve their skills and abilities. However, one of the faculty member (SSD) points out that he suggests to provide a course in SPSS (Statistical Package for Social Science) to the academic staff in the department, but the department board decline that. The faculty member adds that the department board claims that there is no time available for such course in the academic staff's time schedule. In this respect one senior leader (SL1) said:

"The faculty offered a computer course to its academic staff. Although, the attendance was very low, therefore the course was cancelled. In my opinion there are two reasons for that; the first one is from Libyan culture point of view faculty members do not accept to go back to the class as trainees. Second reason is most of those faculty members are working as part time lecturers to increase their income, since the current salaries do not fulfil their needs. Thus, they have no time for improving their skills".

SL1 (LF) further comments that at the level of the university there should be a plan associated with necessary mechanisms for staff's training programmes. Also, the attendance of such courses should be compulsory and not for personal desires.

Furthermore, one faculty member (EED) states that some faculty members improve their skills using self-learning. In this context the same faculty member said:

“Myself I tried to improve my skills through e.g. supervising student's final project, where I can learn about new technique such as fuzzy logic or/and neural networks which needed in that project”.

In addition, SL2 (SSD) indicates that he proposes a programme called “senior and junior” aimed to find some mechanism to enhance the co-operation between new and old generations of academic staff in the department. This programme is expected to facilitate the flow of information and support exchanging knowledge between them. Nevertheless, he further states that ‘Libyan culture’ plays its role to frustrate the programme, since new generation think that they have same experience, skills and ability as old generation. On the other hand, interviews with senior leaders revealed that there are few limited courses offered by both embedded case studies to their support staff in special occasions. For example in EED when new laboratories’ equipment arrived, the producer company offers short operation training course(s). The SSD offers one English language course to some students who expected to complete their postgraduate studies abroad.

6.2.6 Reward and Recognition

Interviews revealed that there is a general agreement among all respondents from senior leaders, faculty members and support staff that the reward and recognition system in both embedded cases is unsuccessful and ineffective. They further added that the reward and recognition system adopted by the university is frustrating any intentions or/and desires towards offering good initiatives. One senior leader (SL2) mentions that despite Libyan HE legislations indicate that excellent work should be rewarded; however such legislations are not applied effectively. He adds, because there is no clear criterion provided by these legislations in how excellent works or excellent efforts could be identified and evaluated.

In addition, a number of faculty members from both embedded case studies commented that the reward and recognition system adopted is blind. They added that people who work hard and people who do not are treated equally. In this respect one faculty member states:

“The disciplinary regulations are not applied effectively in both levels of department and faculty, because of collegueship and

friendship [Libyan social culture]; this leads to increases the level of absenteeism among faculty members which consequently influenced many educational processes. Such absenteeism is mainly because those faculty members are working as part time lecturers or consultants to increase their income”.

One senior leader (SL1) points out that there is a lack of appreciation and acknowledgment to the people who participate or offer new values and attainments. Both senior leaders (SL1) pointed out that there are no criteria adopted for rewarding and recognising excellent teaching in both faculties.

Moreover, a faculty member from SSD mentions that there are two main reasons behind inefficient and ineffective reward and recognition system in the department:

1. The lack of financial resources.
2. The lack of understanding by senior leaders at level of university that such system can play vital role in motivating and driving people towards achieving continuous improvement.

One senior leader (SL1) states that if a faculty member teaches twelve hours a week in addition to his eight regular teaching hours, a faculty member will obtain maximum bonus. SL1 further comments that this puts the faculty members in a race to obtain maximum hours regardless of the department needs. Also, such issue hampers the academics' desires towards research activity. SL1 further adds that Libyan HE leaders think that this will recruit, retain, motivate and encourage faculty members. In this respect SL1 further said:

“Twenty hours teaching per week need more efforts, focus and time to be prepared, this sacrifice the quality of teaching”.

Additionally, senior leaders, faculty members and support staff in both embedded cases mentioned that there is no criterion such as qualitative measures adopted for assessing the performance of individuals, teams, departments and faculties. One senior leader (SL1) and two faculty members (SSD) indicated that the only available criterion for recognition at the level of both faculty and department is subjected to the personal opinion i.e. evaluation of faculty and department head. Regarding the same issue a senior leader (SL2) states:

“My jurisdiction to reward or recognise an exceptional effort provided by any department member is limited; in this case I can only issue a recognised letter for this purpose. This letter is directed to the faculty head and then to the university's administration. This process takes long time and complex procedures which reflects administrative bureaucracy”.

Additionally, one senior leader (SL2) mentions that excellent students' work must be recognised in order to motivate and encourage them towards more successful work; unfortunately this issue is very limited at the level of departments.

6.2.7 Commitment to Quality

In this theme, interviews with senior leaders, faculty members, and support staff in both embedded cases reported that they are aware that commitment to quality is essential. However, they commented that awareness alone is not enough and need to be facilitated. They added that this could be achieved by enhancing the infrastructure for instance buildings, good libraries, laboratories, information networks, and independent financial resources. They further added that the lack of such infrastructure's aspects in both embedded cases affects the staff's commitment to quality. Also, (SL1) points out that the quality of all activities provided by the university including the activities offered by the faculty is negatively impacted in the absence of efficient infrastructure. Therefore, he adds that the role of the university and its faculties towards other institutions and society as a whole is hampered. Hence, most respondents from both embedded cases think that the university leaders do not efficiently carry their responsibility and commitment towards realising continuous quality improvement (CQI).

Furthermore, a number of faculty members mentioned that there are some aspects reflect the commitment to quality in both embedded case studies. For example, EED offers new teaching facilities such as white boards and data show. In this esteem SL2 said:

"Personally I discussed with number of Libyan and foreign companies who work in the same area to help the department by offering us some laboratories equipments and devices. This comes as a result of increases in students' numbers; hence the department needs more facilities and support. Also, I discussed with them the possibility to co-operate with us by adopting students to practice their field training and internship in their sites."

Additionally, senior leader (SL2) points out that the department (SSD) seeks for new institutions where students can practice their theoretical knowledge. Also, SL2 (SSD) mentions that SSD emphasises that the final students' projects should be more related to the real social problems. He further states:

"I contact number of peer departments around the world such as in Egypt, UK and US to adopt some new programmes that match the department's needs as well as the Libyan culture."

Also, SSD offers training programmes to other employees' institutions in the society including schools, hospitals, and nursing homes. On the other hand, senior leaders, faculty members and support-staff in both embedded cases claimed that reviewing and renewing courses' contents from time-to-time is the most aspect reflects both embedded cases' commitment to quality.

Nevertheless, interviews with faculty members and support staff in both embedded cases showed that there are a number of aspects reflect a lack of commitment to quality. One of the support staff (EED) points out that the maintenance procedure system of the department's laboratories is inefficient. The support staff adds that in the absence of independent budget for laboratories, many experiments could be cancelled or delayed due to the bureaucracy of administrative procedures. This will affect the quality of practical educational programmes. SL2 (SSD) points out that the department board suggests a number of plans that could improve and enhance academic activities provided by the department. SL2 (SSD) adds however, it always collides with the absence of executed mechanisms with the faculty (LF) and bureaucracy. One of the faculty members (EED) states that the majority of academic staff members in the department are working as a part time lecturers or consultant. This impacts their attendance of the department board meetings, such issue leads to a lack of communication among them and delayed many educational activities needed by the department.

Moreover, two faculty members (SSD) agreed that in order to strengthen the department's commitment to quality, it should be given enough authority and facilities. These two faculty members further added that independent financial resources are the most important facilities that could be offered to the department. One support staff (SSD) points out that there is a lack of commitment from university to provide the necessary requirements needed by their staff and students. Also, two senior leaders (SL1) mentioned that university leaders are not committed to offer faculties and departments with the necessary requirements to achieve CQI.

6.2.8 Measurement

There is no evidence in the related documents about adopting, developing, or using any approach or instrument by Libyan HEIs in general including Al-Fateh University for evaluating their provided programmes or/and services. Also, there is no evidence that Libyan HEIs used internal or/and external units (auditors) for assessing their provided

programmes and services. Regarding this point interviews revealed that senior leaders in both embedded cases agreed with what has been mentioned above. However, one senior leader (SL1) states that the only evaluation in EF (if correct) is through a personal belief during involvement in daily events. The SL1 adds that:

“This gives the faculty and departments an opportunity to compare different present issues with the past ones and conclude for future. In addition, I would like to point out that there is no technique or approach adopted by the faculty or by the University for assessing or evaluating provided activities.”

At the faculty level both senior leaders (SL1) pointed out that there is no training programmes offered by both faculties to their staff regarding self-assessment concept. Moreover, there is a general agreement among senior leaders and faculty members in both embedded cases that the curricula offered by them are reviewed and evaluated from time to time. The revision and evaluation are carried out by special committees. These committees comprise a number of academic staff members of the faculty or/and department. In this context one faculty member said:

“In many occasions such evaluation is accomplished according to the belief of the subject’s teacher(s) and usually the department approves what has been suggested by the subject’s teacher(s)”.

Furthermore, respondents from senior leaders and faculty members mentioned that there are no particular criteria for assessing the performance of staff members in both embedded case studies. However, two senior leaders SL1 (LF) and SL2 (EED) mentioned that only through the students’ complaints some aspects of teacher’s behaviour or performance could be known. SL2 adds that at the end of each semester, a teacher/lecturer has to write a report regarding his/her subject. Such a report should indicate problems faced the subject, the amount of material given, and the students’ performance. SL2 further adds that if the report indicates that the material covered less than 80%, then the subject should be repeated. In addition, the reasons must be investigated and treated according to the regulations.

Additionally, interviews revealed that the students’ evaluation in both embedded cases is carried out mainly through unseen (traditional) exams. SL2 and two faculty members (SSD) pointed out that in some subjects, teachers offer different types of exams (assessments). For example, essays, individual or team presentations, and oral exams. SL2 adds however, such exams are most likely subjected to the teacher’s belief. He further adds those types of exams become very limited due to increases in students’

numbers. In addition, same SL2 points out that field training report plays important role in student's assessment. This report is provided by one of the social institutions for example, hospitals, schools, nursing homes, and jails administration where students can practice their knowledge. The department provides such institutions with the report's form for the student's assessment. At the end of field training work, each institution submits the report(s) back to the department. Also, the students' class attendance and their general behaviour are other aspects of students' assessment in both embedded case studies.

Interviews showed that students from both embedded cases claimed that diversity in exams gives them more opportunity to demonstrate their knowledge. They added that through many types of exams there is more chance to pass, since the total mark will be distributed among those exams. However, they further added unseen exam (traditional) gives only one chance and does not reflect the real student's academic performance level.

Furthermore, respondents from senior leaders pointed out that quality tools and techniques were not used either completely or partially in both embedded case studies to analyse or enhance any process improvement. Also, both senior leaders (SL1) mentioned that both faculties did not use any approach or method to assess their provided activities through comparing them against other excellent peers (benchmarking). However, a number of faculty members from both embedded cases pointed out that they are updating their subjects through, for example searching other universities' websites. They added that this gives them opportunity to compare the contents of their subjects with excellent ones. They further added that such efforts are occurred on individual bases.

6.2.9 Continuous Improvement

Interviews revealed that all respondents including senior leaders, faculty members, and support staff in both embedded cases are believed in importance of continuous quality improvement (CQI) processes. Also, a senior leader (SL1) mentions:

“Both the senior leaders in the general public committee of HE and in the university public committee are aware of the value of CQI processes. I also believe that all Al Fateh staff understand and recognise the need for continuous improvement.”

However, there is agreement among senior leaders that there is no clear short or long-term approach adopted by both embedded cases for CQI processes. On the other hand, senior leaders in both embedded cases mentioned that the aspects of continuous improvement process exist are through a daily work where temporary evaluation of the processes and action take place. Additionally, senior leaders and faculty members in both embedded cases pointed out that the curricula provided by them are continuously improved (see section 6.2.7).

Additionally, SL1 (EF) indicates that the faculty recently changed its curricula based on the changes encountered the secondary schools' programme. Same SL1 adds, this assumes that students from secondary schools should accomplished minimum requirements of standard knowledge within their schools. Nevertheless, the level of those students when attend the faculty are found below the minimum requirements. Thus, it puts the faculty and its associated departments in dilemma. SL1 further adds that the public committee of education decided to adopt such new programmes without taking in consideration the necessary training courses for the secondary schools' staff.

Senior leaders and faculty members in both embedded cases mentioned that it is difficult to adopt any strategic plan for CQI while both embedded cases having problems in their infrastructure (see section 6.2.2 and 6.2.7). Also, two senior leaders SL2 and SL1 pointed out that in the presence of poor infrastructure, lack of employees' training programmes and bureaucratic administration, it is hard to adopt effective strategy for CQI. One of senior leaders (SL1) indicates

“At the level of university there is a lack of well-organised planning. I think that this leads to inefficient utilisation of the available financial resources.”

Furthermore, senior leaders (SL2) stated that both embedded cases do not adopt any assessment approach for assessing their stakeholders' needs. They added that the main stakeholders of the two cases are students, staff members, government, employers, and society as a whole.

Faculty members in SSD emphasised that the students' field training is considered one of the most important aspect of continuous improvement process offered by the department. Those faculty members added that in field training programme the department always seek for new institutions and new types of social problems. This gives academic staff opportunity to new research topics. Also, that makes student more

close to the real life and enhance his/her theoretical knowledge. Additionally, SL2 (EED) and number of faculty members (EED) pointed out that the department attempts to contact several companies to help contributing in improving labs and other needed facilities. Also, the department gets in touch with other peer departments in one of the German universities to co-operate in different academic activities. SL2 (EED) adds that such co-operation would help and enhance improving the quality of processes provided by the department.

6.2.10 Empowerment and Involvement

Definitions of empowerment and involvement are given in section 3.3.10. On the other hand, interviews revealed that there is a general agreement and awareness among all respondents including senior leaders, faculty members, and support staff from both embedded cases about the importance of employees' empowerment and involvement. Also, there is a general agreement among the same respondents in both embedded cases as members of the department board that they are entitled to contribute effectively in decision-making. Senior leaders in both embedded cases mentioned that all issues related to the department except financial issues are discussed openly in the department board where each member can ask, criticise, discuss, and suggest his/her opinion freely. They added that the final decisions are taken by the board and not individually by senior leaders. However, senior leaders in both embedded cases commented that university top-management does not emphasise the notion of empowerment and involvement. They added that this could be identified through the lack of environment in which people have the ability, confidence, and commitment to take the responsibility and rights to improve the processes. Senior leaders further added that the university staff at all levels should be supported and given the necessary knowledge, skills and abilities to improve processes.

Senior leaders in both embedded cases indicated that there is a consciousness and belief among Libyan educators, at different levels, in co-operation and involvement of society's institutions for instance, business, industrial, and social institutions in HE programmes. Nevertheless, interviews with the main employers and senior leaders revealed that there is a lack of co-operation and co-ordination between those employers and the university including its departments, about the involvement of employers in university's educational programmes. Additionally, SL2 indicates:

“The main link and co-operation between the department (SSD) and employers lies mainly in the field training programme. In such

programme, students should spend interval of time practicing their theoretical knowledge and deal with some aspects of the real life jobs.”

The same SL2 adds that employers in this case are required to provide a report regarding each student's progress during such field training. On the other hand, there is agreement between the main employers of SSD's graduates (i.e. schools and JA (jails Administration)) that the contribution of those graduates in their institutions is limited. In this context, one of employers said:

“There is a lack of understanding among different people in our institution regarding the role of social specialist; I think this is due to culture aspect where those people [as prisoners] can't express their problems, feelings or opinions to a person they do not know.”

However, one faculty member (SSD) comments that social institutions as the main employers of the department's graduates do not possess a skilled and qualified people who are able to be involved in e.g. course design or/and evaluation of educational programmes offered by the department. The same faculty member (SSD) points out that there is misunderstanding in such institutions about the role of social specialist. Hence, they do not help and support the social specialist to offer a good job. Other faculty member adds that leaders in these institutions are not aware that social problems need to be solved through analysis and research and not through punishment. On the other hand, one faculty member (SSD) emphasises that the department should be more open with those social institutions. The faculty member further adds that this could be achieved by inviting senior leaders of these institutions to the department and discusses with them the common issues. Also, the department should offer those institutions' employees short training courses and share them knowledge and information. In addition, collaboration research between different social institutions and the department should be encouraged and supported.

At the level of EED, the Head of Training Administration (HTA) in General Electrical Company (GEC) as one of the main employers points out that his company co-operate with twenty seven professors from the university as consultants. However, he adds that this co-operation does not contribute effectively in enhancing the link with the university. On the other hand, one faculty member (EED) mentions that the relation with GEC is through offering training programmes or consultancy. Moreover, interviews with the main employers of EED's graduates include GEC, GTC (General Telecommunication Company), and OS (Oil Sector) showed that they train graduates

who applied for job in their training centres. They claimed that such graduates lack the appropriate skills required for the jobs

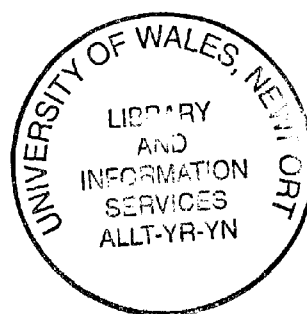
Moreover, SL2 (EED) points out that recently the department co-operate with some international companies (in the same area of interest) who invested in Libya. Those companies offered the department some laboratories' equipments. Also, give opportunity to the students to visit their sites and do small projects. It should be noted that these companies are not the main employers of the department's graduates. Furthermore, SL2 (EED) states that one of such companies provide the department with a report about some graduates. This report includes results of interviews with those graduates who applied for job with this company. The report comprises a lot of comments such as students facing difficulties in practical side, communication skills, and English language. SL2 (EED) adds that this report found valuable and important towards enhancing the evaluation of the programmes provided by the department. Additionally, SL1 (EF) states that the faculty tried to contact many Libyan oil companies as one of the main employers of graduates to co-operate and offer the faculty's departments a regular feedbacks regarding its graduates' performance. However, SL1 (EF) adds that there is misunderstanding among the responsible bodies of such companies about the importance of the relation between them and the faculty, accordingly the relation with such companies still ineffective. However, at the level of EED, interviews with SL2, faculty members and support staff revealed that neither employers offer the department a feedback about its graduates who work with them nor the department request such a feedback.

However, SL1 (EF) and SL2 (SSD) pointed out that there is no connection between the university and its graduates. They added that only a few graduates (on personal bases) are keeping in touch with the university in case if they face a problem in their work that might need to be discussed with their professors.

6.3 Summary of Chapter 6

This chapter presents the major results from the in-depth semi-structured interviews carried out in both embedded case studies. These cases are EED and SSD in Al-Fateh University. The targeted groups are; senior leaders, faculty members, support staff, students, and employers. The chosen case study as a strategy for this research and the use of the semi-structured interview as the main data collection tool provides valuable in-depth information about quality issues in the context of the Libyan HE through Al-

Fateh University and the two embedded cases. To improve the internal validity multiple sources of data for example, documents, and earlier research archives were used during the data analysis. The next chapter will provide the discussion and analysis of the research findings.



CHAPTER 7

Discussion of the Research Findings

7.1 Introduction

The importance of this study exists in the potential effect of its research findings (previous chapter). This chapter will discuss the findings of this research and their implications, associated with a comparison to what has been written in the literature review. Naturally, this discussion will focus on the main aim and the related objectives of this research, which are stated in section 1.3. Also, the discussion will be based on the analytical framework which was developed from the literature review. Such a framework has enabled the researcher to conduct in-depth semi-structured interviews with the targeted respondents in both embedded cases. In order to fulfil the aim and objectives of this research, the findings within two embedded case study departments were therefore presented in chapter 6 and now this chapter aims to provide discussions and implications of these findings. The analytical framework is based on a number of key TQM principles (framework themes) identified from literature review. These Key TQM principles include; leadership, customer focus, teamwork, open communication, education and training, reward and recognition, commitment to quality, measurement, continuous improvement, and empowerment and involvement. The interview questions or issues are based on the aspects and concepts of such Key principles from literature review. Sections 7.2-7.11 will discuss the findings of those key principles in the Libyan Higher Education (LHE) context.

7.2 Discussion of Leadership in Libyan Higher Education

The research revealed that leadership in Libyan HEIs encountered changeability and unreliability from 1955 to 1991, specifically in the interval between 1983 and 1991 named 'students' administration' (see chapter 4, section 4.4). Likewise, Alfnish *et al* (1998) in their comparative study mentioned that such administration was the worst (chaos) administration. In such style of students' administration all segments of university see that they are entitled to manage different aspects including activities and processes in the university. Accordingly, each faculty member, student, employee, and worker saw that he/she had the right to lead the university and manage its affairs, hence there was a great deal of conflict. This situation creates a kind of mystification and disorientation which leads to disorder and confusion in the university administration. As a result, many university assets were lost, for example books, labs' equipment and instruments. Such situation opened the doors for some people who had no experience

or/and qualification to manage universities, faculties, and academic departments. In addition, many regulations were changed or cancelled due to individual or group desires. Table A.1 in appendix 1 outlines Deming's view that for total quality an organisation needs constancy of purpose and it is clear that during the time of "students' administration" there was chaos, inconsistency; lack of respect for the university and certainly no constancy of purpose.

The lack of constancy of purpose at the level of department was also confirmed by respondents from faculty members and support staff where the department head frequently changed. This also creates a gap and disintegration in the department's administration. Those responding faculty members and support staff added that the problems which could be solved by the previous the department head could happen again with the new department head. In addition, the lack of effective documentation causes further change of direction of progress. This finding can be compared to the literature review where Lewis and Smith (1994) indicated that the quality guru Feigenbaum emphasises the importance of documentation while it allows visualisation and communication of work assignments. The implications of poor documentation discontinuing could lead to wasted effort and time for the new department heads. Also, it creates an ineffective communication process within the department, and that hampers continuous improvement processes through discontinuity in tackling problems.

Accordingly, the quality author Sirvanci (2004) bears out what has been found above. He indicates that in a university the type of shared governance leads to diffusion of the authority and responsibility of the president and deans of university. Sirvanci adds presidents and chancellors as leaders of university are entitle to set goals, organisational values, and performance expectations. However, since they lack the necessary authority, it is difficult for them to deploy such values and goals through the layers of the university. Based on the above discussion the "students' administration" as one of the Libyan HEIs' leadership styles and its characteristics is unique finding, as it has not been reported in the literature review either in the western countries or in the Arab countries who supposed to have similar culture and social structure.

Additionally, the present style of leadership (public committee) in the Libyan HEIs possibly reflects democracy and integrity in its context, since it encompasses all segments of the university (see figure 4.2 in chapter 4). This includes; faculty members and support staff, students, and employees and workers. However, the findings from interviews revealed that senior leaders from both embedded cases stated that leaders'

authority or/and empowerment in any Libyan administration including the university, is strongly influenced by Libyan culture (social or/and political). From that, it can be seen that the existence of external political and administrative mechanisms, for implementing a central plan, can be expected to affect the process and structure of decision-making in HEIs. Accordingly, this reflects that government intervention is very common. This is also confirmed by the literature review through Libyan educators including Alfnish *et al* (1998) and Al-Teer (2006) who indicated that such intervention impact educational programmes and university's regulations. For example, interviews revealed that due to such intervention students' performance regulations are suspended. This leads to accumulation of students in faculties and departments, eventually affecting the educational processes, education provision, learning processes, and other resource provision. This case is considered by this research to be unique finding since it has not been reported in literature.

The nature of the Libyan political regime (state socialism) in fact, expects such interventions to occur. However, according to TQM literature for example in section 2.1.2.4 indicates that how different processes managed towards benefits of organisations, the concern should be on what benefits that HEIs have gained. Unfortunately, the findings showed that, such interventions were relied on political and social consideration. This meant it was unrelated to the quality improvement requirement. Therefore, the implications of such findings, are that the efficiency and effectiveness of staff members' performance, in both embedded case studies, are largely affected, thus it affects the quality level in these two case study departments. Furthermore, such interventions of the state bodies in the HEIs affairs made senior leaders in these HEIs lose their power and authority. Consequently, Libyan HEIs are very influenced by the interventions of the state bodies. Such bodies could be categorised in to two levels namely the General Public Committee (GPC) and Public Committee of Higher Education (PCoHE). Furthermore, the research revealed that the absence of leadership training affected the effectiveness of the existing leadership's role. This issue is confirmed by Porter and Yergin (2006) in their report which indicated that education administration is poor, with very few trained personnel at any level.

This research revealed, in section 6.2.1 that it was considered by staff that there was not enough empowerment to the university top-management at all levels. However, the authors which include Lewis and Smith (1994), Michael, *et al* (1997), Fletcher (1999); Martin (1993); Morris and Haigh (1996); Kondo (1997); Sun *et al* (2000) and Baker et

al (1990) who found that employees' empowerment was considered a factor for success in achieving good quality processes. However, effective leadership means that senior leaders have had the ability to lead an organisation to getting success. Therefore, inefficient and ineffective leadership is an obstacle or barrier on the way of improvement. This concurs with authors for example, Sallis (2002) and, Freed and Klugman (1997) who stated that leadership could be a fundamental barrier towards improving processes offered by an organisation.

It is indisputable that awareness is the milestone of any future change or successful project of quality improvement. Accordingly, findings from interviews (section 6.2.1) demonstrated that there is awareness among senior leaders at different levels of Libyan HE include PCoHE, Libyan HEIs senior leaders both at the level of universities and departments that they should learn from pervious problems and employ the results to improve the future. Also, senior leaders in both embedded case studies stated that there is more awareness among top-management at all levels of Libyan HE than before regarding the importance of improving the quality of Libyan HEIs' activities and services.

As described above such awareness among senior leaders in Libyan HE could offer an environment of future change and reform besides education and training programmes. Also, that could enhance commitment to continuous quality improvement (CQI) particularly among senior leaders of HE in general. Despite such awareness, the research findings in section 6.2.9 revealed that there is no evidence of adopting any short or long-term approach or plan regarding improving the quality services provided by both embedded case studies. That indicates that awareness alone is not enough; there should be practical action regarding this issue. In addition, understanding quality initiatives by staff members at all levels including senior leaders is an important action towards improving the quality. If staff members within the university are educated and familiar with quality concepts, notions, and practices they will be more able to understand the quality initiatives. Also, they will be more keen and the initiative gains impetus. Thus, need for understanding quality initiatives appears to be the initial barrier to overcome. In addition, it is difficult to make any progress when organisation's staff members lack the necessary knowledge for change. This is consistent with what has been found in the literature review as Freed and Klugman (1997) emphasised the importance of staff members understanding the CQI philosophy in order to start the quality improvement processes.

Senior leaders, faculty members and support staff in both embedded cases responds differently to the question are your senior leaders able to carry their responsibility towards removing barriers and obstacles that hamper or prevent staff to do their job effectively and efficiently? Accordingly, senior leaders in both embedded cases emphasised that the leader's specialty (same area of expertise) plays an important role in finding a common understanding between them and their leaders at both university and faculty levels. If their leaders are from a different specialty, they found it difficult to communicate and convince them of their needs and requirements.

Section 6.2.1 indicates that people expect their leaders to understand the needs of the organisation despite their specialty. In this case leaders are able to understand and communicate effectively the lower levels' needs in different units of the organisation. As mentioned earlier in this section, the current style of Libyan universities leadership encompasses different segments of the university. Such style supposes to reflect cross-functional team where members of the team are come from different faculties and departments. Also, it supposes to break down departmental barriers. This could be achieved through effective discussion and exchange information among team members. However, the response from senior leaders in both cases indicated that there is a lack of communication and understanding. Understanding quality initiatives from senior leaders (discussed earlier) is important in order to understand lower level's needs. Hence, barriers and obstacles facing staff remembers in organisation could be removed. This is contrary to what many authors mention including Unal (1997); Kruger (2001); (1995); Deming (2002); Jelinek et al (1995); and Baker *et al* (1990). Those authors mentioned that effective leadership is active and should support staff members through eliminating or at least reducing problems and obstacles hampering them achieve good quality work.

The implication of this finding is the creation of more barriers which delayed or hindering many educational processes particularly in applied science where their academics discussed some facilities are needed urgently. In this case, quick decisions are required where the ability to understanding lower levels needs facilitating such decisions. The finding that speciality of university senior leaders could work as a barrier or obstacle in facilitating the quality of educational process is a unique findings for Libyan HEIs.

The findings from both faculty members and support staff emphasised that old generation leaders (department heads) are more able to deal with problems and obstacles than new generation leaders. The research findings revealed that old generation built their leadership experience through improving themselves over time. However, such improvement does not include involvement in leadership training programmes, which is also raised by respondents from faculty members. Such programmes could enhance particularly the ability of senior leaders' understanding and familiarity with needs of different units of organisation. The issue of education and training will be discussed in more details in section 7.6.

Moreover, faculty members and support staff in both embedded case studies added that senior leaders mainly face two problems towards removing obstacles for staff members. These problems include the absence of independent management of budget and administrative bureaucracy. Both case studies departments do not have formalised budgets to support their educational processes. Faculty members and support staff believed that their departments can not afford to ignore offering their educational programmes properly. In the absence of necessary budgets, staff members have to do more with fewer resources. This might go beyond that where practical experiments could be delayed or cancelled as mentioned by one support staff (research findings section 6.2.7), because a request for necessary electronic components or instruments essential for experiments is a long process. Likewise, in Social Service Department (SSD) senior leader suggest some plans to improve academic activities provided by the department. So, it was found that such suggestions collide with the lack of independent budget and bureaucracy. Both embedded case studies completely rely on the budget of the university. That means most decisions; most of the time has been taken externally. This situation makes it difficult for senior leaders in both embedded cases to realise and create their own values, goals and, improve the system. The style of such management reflects a traditional management concept in which a top-down management approach is dominant. Hence, the important decisions are always centralised.

According to Martin (2005), bureaucracy developed in an environment when complexity and size of organisations increase rapidly in the absence of computer-based technology to assist with routine processing of administrative work. In this context there is an absence of computer-based technology in administrative work within the Libyan universities. However, adopting such technology in Libyan universities will help administrative people to work effectively. Also that would aid solving different

problems rapidly and make-decisions more efficiently. This is consistent with what has been raised by MBNQA (2004) which emphasised that the organisation should focus on information and knowledge that people need to do their work. Using an effective information system can help keep current with changing educational needs and directions and develops solutions that add value for the students, stakeholders, and the organisation. The implication of this finding could lead to hinder long and short-term educational programmes' effectiveness which impacts the quality of provided activities in general and students' knowledge and skills in particular.

Interviews with faculty members and support staff revealed that the role of senior leaders in creating goals, values and systems that lead to improving the quality provided is limited in both embedded cases. Such limitation is mainly subjected to the issues of budget and bureaucracy mentioned above. It is also subjected to the leaders' ability, skills, visions, and ambitions to improve the quality processes. Leaders in different organisations including universities should be able to create values and build strategies that could help guide all activities and decisions in the organisation. Such values and strategies should fulfil the needs of all staff members, students, and stakeholders. Senior leaders in both embedded cases are trying to create some values related to their ability and authority. One of the senior leaders tried to contact some employers in order to discuss with them different issues about graduates, educational programmes, and how they could help to provide some educational equipment. Another senior leader tries to contact other excellent peers in order to improve course contents offered by the department; however it was seen that all such attempts were taken at a department level.

Literature on strategy for TQM (MBNQA, 2004) shows such efforts should be under the general strategy of the university. This indicates that senior leaders at the level of university are not able to address and establish necessary values and systems that encourage and support all faculties and departments. Though, the existence of those values and systems could help and guide the decision-making of all faculty members, support staff, and enhance university to accomplish its mission and achieve its vision in an appropriate way. From the above discussions senior leaders at the university lack the necessary vision which describes where and how the university wishes to be in the future. On the other hand, university's senior leaders should have clear vision, visible values and should be capable to create systems and methods for achieving excellence. The literature review of many authors and quality awards such as; Chelsom *et al* (1998), Zhang (1997), Kanji (2001); MBNQA(2004); EFQM (2003) recognise the role of

leadership in creating the goals, values and systems that guide the pursuit of continuous improvement as vitally important.

Regarding the question “to what extent senior leaders in both embedded cases are able in examining the effective use of resources available?” Respondents from faculty members and support staff stated that their leaders are effectively examine the resources available despite limits of such resources. On an individual bases and through personal relationships, senior leaders in both embedded cases attempt to facilitate the available resources and tried hard to obtain some facilities or create co-operation link with other organisations.

For EED such organisations include; Libyan and foreign companies who work and invest in the same area of EED. SSD co-operate with social institutions for example different schools and Jails’ administration. In the case of SSD those institutions are co-operating in students’ field training where students practicing their knowledge and skills as a practical part of the curricula provided by the department. Moreover, the lack of resources includes independent financial resources in both embedded cases. Accordingly, respondents from faculty members and support staff in SSD mentioned that senior leader attempts to establish a small library inside the department by collecting some books to fulfil the needs of the faculty members, support staff and students particularly who are involved in the final project stage. It can be concluded that senior leaders in both cases are doing their best in utilising and exploiting available resources. This includes exploitation of their personal relationships towards offering some resources needed by their departments. This indicates that senior leaders in both embedded cases believe that faculty members, support staff and students should have the necessary resources they need to perform their tasks effectively, but they also recognise the difficulties in getting such resources.

Based on those above findings, the absence of effective and efficient planning, at the level of university, could lead to ineffective alignment of the purpose and goals of different faculties and departments to university strategic goals. Also, one of the ultimate consequences of such an issue is the insufficient allocation resources and infrastructure needed to carry out required educational processes. As a result, education, training and learning processes have been discouraged and hampered which affect the level of students’ knowledge and skills. In addition, the job effectiveness of faculty and support staff could be influenced by the lack of sufficient resources necessary for

educational and research activities. Therefore, senior leaders at the level of university should offer and examine the resources required for faculties and departments in order to accomplish their goals successfully. Likewise, the importance of leadership ability in examining and allocating necessary resources that would enhance continuous quality improvement is emphasised by Spanbauer (1995), Kanji (2001), and Michael *et al* (1997).

On a positive note, the research findings revealed that senior leaders at different levels include university, faculty, and department are considering the ethical dimension in their behaviour. Leaders in different organisations include universities should serve as a role model in support of corporate policies, professional ethics, and corporate culture (MBQNA, 2004). In this case the leader should demonstrate, by example, in his/her ethical behaviour, while it is necessary for maintaining influence on the followers. People in general like their leaders practicing what they preach. Leaders in both embedded cases are demonstrating different aspects of ethical behaviour in their job include fairness and honesty. That is most likely due to two main factors; first is the Islamic religion (official religion in Libya) where leadership in Islam is based on trust, integrity and justice as discussed by Khan (1985). Also, a leader should try his best to guide his followers, protect and treat them fairly and with justice. The second factor is the social dimension where Libyan society believe in moral behaviour include honesty, sincerity, and to be true. However, there is shame and disgrace if a person behaves different. On the other hand, as in any society it is not common that all people consider ethical dimension in their behaviour in the Libyan society. This is consistent with the research finding where one of the senior leaders indicates that some faculty members as leaders in their classes are not treating students equally where those faculty members practicing favouritism or bias among students. It is common in the Libyan society and as a cultural dimension that personal relationships influence people's ethical behaviour which is in contrast with the above mentioned beliefs. The likely implication of this inconsistent approach makes students upset and disappointed as they feel injustice. Such faculty members' behaviour affects students' enthusiasm and keenness towards gaining knowledge, skills, and achieving good performance. Also, this gives a bad impression and leads to a bad reputation particularly of those faculty members and university in general which eventually impacts the role of university towards its students, stakeholders, and society as a whole.

Based on those findings, the Libyan universities should emphasise and adopt servant leadership notion on their leadership style. Greenleaf (1970) indicates that servant leadership does not require a formal leadership position. Also, servant-leadership encourages collaboration, trust, foresight, listening, and the ethical use of power and empowerment. This could be applied on individual or/and organisation bases. Additionally, the notion of a leader as a servant has been part of Islam since its beginning, and was developed by Greenleaf (1970). For example, *Hadith* (term refers to the sayings and actions of Prophet Muhammad (*peace upon him*)) stated that “*sayyid al qawn khadimuhum*” (Khan, 1985). This means that the leader is the servant of his followers and he is to seek their welfare and guide them towards good. Libyan universities and their faculties and departments could exploit the influence of Islamic tenets to enhance and support their leadership style towards servant leadership. Based on the above discussion regarding the importance of considering the ethical dimension in leaders’ behaviour the literature review reported that Gonzalez and Guillen (2002) and MBQNA (2004) emphasised such dimension in the organisation’s leadership behaviour. In this context leaders should work as example through practicing ethical dimension in his/her behaviour. This could be accomplished by moral correctness of behaviour and practical rightness in leaders’ actions in relationship with his/her followers. Additionally, literature review reported that university leadership should reflect and practice servant leadership which raised by Spanbauer (1995) who pointed out that teachers and administrators in HEIs are servant leaders as they offer instructions and services needed by students, faculty and staff. This gives opportunity for leaders to practice their role as a coach and trainer rather than superior.

7.3 Discussion of Customer focus in Libyan Higher Education

The findings indicate customer focus and satisfaction still has not been address in both embedded case studies. There is no specific approach adopted regarding this issue, not only at the level of both embedded cases but also, at the Libyan HEIs in general. Students can be regarded as direct and potential customers of HEIs (Newby, 1999), and the university should understand and satisfy their needs in order to improve its services. Students are important customers in the quality monitoring and assessment processes and literature states it is important to obtain their views.

In both embedded case studies there is agreement among respondents from senior leaders, faculty members and support staff about the importance of students’ views in improving the quality of the services provided by them. Likewise, many authors shown

in the literature review include Ramsden (1991), Richardson (1994), and Gregory et al (1995) emphasised the importance of students' survey in improving the quality of educational processes and activities provided by HEIs. Furthermore, there is a belief among senior leaders in both embedded cases that the survey should take place to know the views of faculty members, support staff, employees, and employers. On the other hand, even though the importance was known, findings revealed that both embedded cases offered students' survey only once. According to senior leaders in both embedded cases, this was due to two reasons, one of the senior leaders states that students do not answer the questions properly and fear to express their real opinion. Another senior leader states that the survey's outcomes were considered by some leaders as embarrassment. Such outcomes are related to senior leaders, faculty members, support staff, facilities, and general services provided as a whole. Also, such outcomes were understood as criticism and it was found difficult to be accepted by most academic staff. Furthermore, the literature faculty (LF) include a "complains' and opinions' box" where students can express their viewpoints regarding educational or service processes provided by the faculty. However, it was considered unsuccessful because students still feel afraid to present their opinions. The others' opinion this reflects that there is a lack of understanding among students about the purpose of this box or/and they do not feel confident to deal with such an approach.

Based on those findings the questions which could be asked are "what is the aim of such a survey"? And "what leaders, in both embedded cases, expect from such a survey"? It is clear from findings that there is a lack of understanding among senior leaders in both embedded cases about the aim of this survey. Accordingly, there is no clear picture among them regarding how to employ such a survey and to what extent it can contribute effectively to improving the quality of services provided by both embedded cases. Equally, there is a lack of understanding among senior leaders in both embedded cases about quality initiatives in general (mentioned in previous section). On the other hand, senior leaders at the levels of faculties and departments should establish and cultivate a culture of trust for students' feedback to be honest and helpful. The start point of such, could to spread the necessary knowledge and understanding among students, faculty members and support staff about the importance of student survey and its role towards improving the quality of educational processes and to satisfy their students desires.

Likewise, senior leaders, faculty members and support staff should be convinced that the students' survey is part of the Continuous Quality Improvement (CQI) process and

not a vehicle for accusation. The literature showed that distrust can be minimised if everybody knows what is going on and that something actually happens, to improve the department, as a result of the survey. Also, the outcomes of students' survey should not be seen as indication or sign of a big change that causes a lot of confusion, worry and problems. Rather, it identifies areas for potential action and contributes to enhance improvement from the point of view of students. Additionally, the survey's outcomes should be transformed into information that can be used within both embedded cases to effect change. Consequently, in order the process to be effective the survey procedure should be transparent and senior leaders must be committed to the approach.

Those research findings about students' survey outcomes goes against literature review where Walton (1985) indicates that Deming believes and recommends that organisations should accept customers' negative feedbacks and use their opinions and comments as friendly data towards improving the design of products and services. Also, the research findings regarding students fear to express their opinions or views is contradicted Deming (2002) in point eight of his quality approach (see table A.1 in appendix 1) "Drive out fear". Deming adds that organisations should encourage people to express their ideas and ask questions through creating open communication environment. In addition, to bring practice in line with Deming point eight, Libyan HEIs should encourage their students to express their views without fear, and accept feedback, through formulating effective communication link with them.

Moreover, direct contact or through writing a request to the department head, are the current available ways for students in both embedded cases to present their individual academic problems. However, such ways do not give opportunity to the students in both embedded cases to express their views about the services provided. They are only limited to solve individual academic problems encountered students. The literature emphasises that direct contact (face-to-face) communication is effective while it gives opportunity to express, judge and understand the subject's issues efficiently. In this context, Thiagarajan and Zairi (1997) emphasised that there is no real substitute for direct contact as efficient and effective way of communication. Additionally, senior leaders in both embedded cases are demonstrating and practicing good listeners to their faculty members and support staff. Within their authority those leaders are helpful and assist their staff in general to overcome problems, for example academic or/and social.

Also, the senior leaders in both embedded cases are trying their best despite their limited authorities and in the absence of independent financial resources to help staff members at all levels. Based on such findings it could be concluded that some senior leaders in both embedded cases listen and communicate to their staff different departments' issues and support them within the available facilities to overcome their problems. These findings are considered good practice by many authors. For example, Freed and Klugman (1997), Kanji (2001), and Burkhalter (1996) who mentioned that it is important for leaders to listen and communicate with their staff and help them in improving the processes. Additionally, and based on the MBNQA (2004) Libyan universities in general should work towards fostering their staff members' well-being, satisfaction, motivation and recognise their needs. For example, services, activities, formal and informal recognition, special leave for family accountability and health care. This would lead to sustain loyalty among university staff members and make them feel secure and tranquil.

One of the main issues that has been taken in consideration when investigating customer focus in the Libyan HE is to what extent both embedded case studies consider and know the needs of Libyan labour market. Also, how they attempted to match their outputs with the needs of such labour market. In order to discuss this issue, documents as secondary sources of data collection were used besides semi-structured interviews to provide "triangulation". Kumar (1999) points out those documents could include government publications and reports, earlier research, and newsletters. Many Libyan researchers or/and educators including Almagory (2005); Alhawati *et al* (2004) and Algrad (2006) investigated the relation between the Libyan HEIs outputs and the Libyan labour market. They concluded that the Libyan labour market has limited ability to contain or hold the Libyan HE outputs, because of many reasons:

- Fluctuation encountered with the oil prices for many years has influence directly the development plans.
- Libya encountered sanction (Libya's global isolation) which impacts negatively on the constituents of the Libyan society and prevents establishing many important projects.
- Reliance mainly on the public sectors rather than private sectors in managing economic institutions and development projects.
- The rapid growth and increases of pupils and students numbers (i.e. one third of population) and its associated expenditure, while investment in this segment of society is long term investment.
- Ineffective connection mechanisms between HEIs and labour market.

Almagory (2005) in table 7.1 shows that the number of graduates from Libyan HE is increased every year. This could be considered as a challenge facing the Libyan labour market and other economical institutions of the state to seek new strategy to reduce the gap between HE outputs and labour market. Additionally, Almagory (2005) indicates that the Libyan HEIs graduated 148.212 students during 2001-2004 and this is more than required by the labour market. Almagory adds that in 1999 the graduates were 21.000 and then the labour market contained only 60% of them. According to this figure, 40% percent of graduates are classified as unemployed workforce. Thus it can be seen that there is a gap between the outputs of Libyan HE and the ability of the Libyan labour market to contain all HE graduates. Accordingly, such a gap was found at the level of Arab HEIs in general by UNESCO (2003a) who stated that there is a failure in the curriculum offered by these institutions to meet the needs of labour market.

Accordingly, the number of unemployed graduates will be expected to increase in the absence of effective action from the Libyan responsible bodies include government, Libyan HEIs, and employers at all levels (public and private sectors). However, investigating or suggesting a solution for this problem is out of the scope of this research.

Table 7.1 Libyan HE outputs for years 2001-2004 (source adopted Almagory (2005:74))

Year	2001	2002	2003	2004
Applied Science	12640	13942	15238	16538
Social Science	19254	21728	23400	25472
Total	31894	35670	38638	42010

Latest available figures published in 2007 show that those students are still increasing (Secretary of LHE, 2007). However, other Libyan educators e.g. Ali (2006) and Alhawati *et al* (2004) in chapter 4 stated that Libyan HEIs still graduate high number of students with low skills and capabilities. In addition, Employers expect from Libyan HEIs to supply them with students who will be able to satisfy their skill and knowledge requirements. This is also emphasised by Porter and Yergin (2006) in their report that the perception of business people in Libya is that the education system is not providing them with the skills the Libyan economy required. Also, Swafy and Ghatass (2003) indicate that HE systems in developing countries (Libya one of them) focus mainly on certification and qualification rather than to deliver necessary skills and knowledge to their students.

Accordingly, it is important for Libyan HEIs to overcome this problem, at least partially; the research suggests in general that those institutions should prepare their graduates for a new era. In this case, such graduates become knowledgeable employees and problem solver, and able to follow the rapid market changes. Also, Libyan HEIs should engage and encourage their students to contribute effectively in the learning processes where students are involved in different activities that could increase and strengthen their thinking, skills and knowledge. For example, case study analysis, assessment process, problem-solving, and synthesis and design. In these activities, students should be encouraged to use different resources (beyond their faculties and departments) of information that they see helpful and suitable for collecting data or enhancing the required solutions. Such resources could comprise questionnaire, interviews, observation, Internet, focus group, and visits to other organisations' sites. The literature review supports this issue through what has been mentioned by Sims and Sims (1995); Venkatraman (2007) where the world of work is continuously encountered dramatic changes, accordingly learning environment provided by HEIs must emphasises an involvement that empower their students with a high quality. For example, relevant knowledge and life long skills. Also, Barnett (1992) suggests that HE as the production of qualified manpower is one of the four dominant concepts of contemporary HE where quality tends to be identified as to what extent students succeed in the labor market. In addition, Barnett mentions "HE as a matter of extending life chances" that HE becomes valuable while it is able to fulfil the demands of society in general and demands of students in particular by providing the latter with knowledge and skills needed by market place.

Additionally, representatives of key employers of Libyan HEIs graduates were not seen as external members in the current leadership style adopted by Libyan HEIs (figure 4.2). However, the existence of those representatives are expected to enhance the effectiveness of Libyan HEIs activities. This could be achieved through sharing the knowledge, exchanging information, thus strengthening and creating efficient collaboration between different sectors and HEIs. Likewise, the literature review reported through Lambert (2003) that networks should be established between academics and business people where they can share ideas and find innovative ways to develop partnerships. Furthermore, for the purpose of self or internal evaluation Libyan HEIs should agree and seek to see themselves through other opinions which include opinions of their students, employers of their graduates, and government. Those opinions could

help Libyan HEIs improve the quality of their provided processes. For example, quality of teaching, curriculum, graduate performance, studying, and every aspect of the student development process through the study period till the preparation to enter the working environment should be considered.

In the same context, interviews revealed that there is no attempt, so far from both embedded cases, towards investigating and analysing the needs of Libyan labour market. On the other hand, there is a general believe among senior leaders regarding the importance of this issue. Also, there is agreement among them that taking care and concentrating on the needs of labour market will offer both embedded cases the opportunity to focus their provided programmes in more consistent with the needs of employers. Research findings showed that there has been no approach or method adopted by both embedded cases to listen or identify the needs of labour market. This is contrary to best practice recommended by Venkatraman (2007) and MBNQA (2004) who indicated that HEIs should determine the needs and expectation of their stakeholders through gathering information and necessary data.

Based on Venkatraman (2007) and MBNQA (2004) above, Libyan HEIs could develop an effective approach to understanding and identifying the needs of their stakeholders in general and employers of their graduate in particular. This could be achieved through gathering necessary data and information using for example, focus groups, questionnaires, research and through using cross-functional teams. Other important issues that Libyan HEIs should consider when using this approach include; effective analysis and interpretation of such data and information towards integrating and compromising the expectations of both students and stakeholders including key employers. Also, it is beneficial for Libyan HEIs to learn how to employ effectively the outcomes of such data and information to enhance improvement processes. In the same context, Libyan HEIs could benefit from quality tools and techniques (see table A.5 in appendix 1) by using them in identifying and managing the complaints and expectations of their stakeholders in general. As a result, Libyan HEIs would be able to prioritise different requirements for improving their provided activities.

Moreover, faculty members and support staff in Libyan HEIs can competently contribute in this issue by employing their research activity towards addressing various problems encountered different Libyan sectors including industry and business sectors. In the same respect, the literature review indicated through Lambert (2003) who points out that the relationship between businesses and universities could be vitally linked

through contract research, collaborative research and consultancy. However, interviews revealed that the 'Engineering Research and Consultancy Office (ERCO)' connected professionally with Engineering Faculty (EF) where consultancy and scientific research are offered through academic staff from different departments. Also, interviews showed that most activities provided by this office are in a form of consultancy rather than research. Based on what has been mentioned by Lambert, EF could enhance and support its relationship with business and industry sectors by establishing contract and collaborative research with these sectors along side consultancy provided by ERCO. Likewise, Literature Faculty (LE) and its associated departments include SSD.

Consequently, activities provided by Libyan HEIs including research activities could be oriented successfully towards tackling and dealing with the problems facing Libyan society in general and those institutions with labour market in particular. In this context, Seymour (1995) indicates that one of four driving forces behind quality concern in HEIs is service orientation. That means orientation of HEIs services towards the needs of stakeholders reflects the quality level of such services. Furthermore, the social responsibility could be enhanced as one of the possible roles of Libyan HEIs towards whole society. It is beneficial that the outcomes of the data and information gathered about stakeholders' expectations to be published in order to share them with different bodies in different sectors and encourage those sectors to pass on their feedback. This will ensure continuous quality improvement among various educational processes is provided by Libyan HEIs.

Students from SSD raised other important issue while practicing their field training in different Libyan institutions include schools, hospitals, elderly houses, and jails. This issue is a cultural dimension in graduates' recruitment. Interviews demonstrate that those students find difficulty to obtain job in such institutions after graduation. Students attribute this problem mainly due to 'wrong person in wrong position', since they found that most of the people in such institutions who occupy the position of "social specialist" have no qualification in this field. Respondents from students pointed out that those people are appointed according to social relations and nepotism more than skills or qualification. Students added that in many occasions most of them found themselves working without payment in such institutions for several months. During this time, if the graduate able to build good relation with responsible bodies in these institutions they may offer him/her a job or they may not.

Many Libyan authors study this issue includes Mogherbi (1998) and Elabedy (1995) who mentioned that the tribal structure and social connections have played, and still exert, a significant role in Libyan society. Hence, the personal and social relationships clearly affect the function of the management in these institutions. In order to understand this situation, it is necessary to discuss the root of such issue in the Libyan society. Both authors Mogherbi and Elabedy added that tribal affiliation and social relationships are the most important factors in determining the choice of management members and most likely employees at different levels. These social relationships have an obvious effect on the management functions in Libya.

However, relations between students and their universities should be continued after graduation where universities can use this relation to build a bridge with other sectors (Lambert, 2003). Graduates who become employees in business and industry sectors could play a significant role towards enhancing and reinforcing the relation between those sectors and university. As Lambert (2003) states this could be through collaborative and contract research. Accordingly, Libyan HEIs should work in advance towards strengthening the relation with its graduates. This could be achieved through establishing a unit or office in these institutions who can work as a link between them and other sectors. The main purpose of this unit or office is to help students find jobs. This will facilitate the needs of graduates towards obtaining the required jobs. Hence, Libyan HEIs have the opportunity to integrate effectively its research activities with the needs of other sectors through directing their graduates to the related jobs. Helping graduates to obtain jobs will sustain and maintain their loyalty to their universities and support the relation between those universities and other sectors. In support on this recommendation Bell (1995) reported that Carlson School of Management (CSOM) established Career Service Centre (CSC) to help students in carrying out their searches for jobs and consequently improved relationships.

Respondents at all levels in both embedded case studies mentioned that there is a deficiency in the university's infrastructure in general. For example, buildings, labs, libraries, workshops, and facilities for people who need special needs. This finding supports many Libyan authors for example, Alfnish *et al* (1998), Al-Teer (2006), and Abodeeb (2006) who stated that Libyan HEIs are encountering poor infrastructure and facilities. It is clear that the lack of infrastructure and required facilities needed by educational processes are barriers towards provide good level of quality in Libyan HEIs. Libyan HE has witnessed rapid increases in number of students; this increase is beyond

the available infrastructure of HEIs. Said *et al* (2004), Alfnish *et al* (1998), Alhawwat *et al* (2004), and Salama (2001) indicated that such increases in students with lack in required resources and facilities are affecting the quality of services offered by Libyan HEIs. On the other hand, responsible bodies in Libyan HE do not respond effectively towards tackling such problem, this indicates that there is a lack of strategic planning in the Libyan HE sector. The availability of such strategic plan would enable the sector through using forecasts, projections or/and other approaches to envision the future for efficient decision-making and resource allocation. Also, creating strategic plan would support Libyan HE modifying and improving the existing programmes. This could be, but not restricted to, achieved through e.g. addition or termination of services, redesigning curricula, adopts new technology, and change in infrastructure.

All respondents mentioned that there is a shortage in essential needs for educational programmes. For example, textbooks, journals and internet access are scarce which leads students mainly to rely on Professor notes. Such limitations in these facilities hamper the knowledge and skills progress of students either to be a good researchers or their ability to match to job requirements. In this context, Libyan educators Al-Teer (2006) and Alhawwat *et al* (2004) attribute the focus of Libyan universities on ‘quantity’ rather than ‘quality’ to the urgent needs of cadres who could run different institutions after independent in 1951. In this case the question does Libyan universities under such circumstances fit the concept of quality “*fitness for purpose*”? This concept requires that the product or service fulfils a customer’s needs, requirements or desires. The customer in the Libyan case at that stage was the country as whole. Nevertheless, “*fitness for purpose*” does not mean focusing on quantity. According to the literature, monitoring and controlling the quality of HEIs is essential either through self-assessment or/and through third party e.g. Quality Assurance Agency (QAA). However, there is no evidence of such monitoring and controlling the quality of services provided by Libyan HEIs (see section 7.9).

Yet, Alhawwat *et al* (2004) argue that increases in the number of Libyan universities and the number of students alone is not enough to judge the performance and quality of the educational system. Based on this discussion Libyan HE system could benefit in this stage from the concept of quality “*quality as transformation*”. Transformation involves a change in form from one state to another, where the focus is mainly on the learners. This emphasises that students should be empowered with specific skills and knowledge that enable them to manage effectively their life and work in this knowledgeable era.

The required and necessary facilities are needed to achieve such issues. Accordingly, Libyan HE responsible bodies should understand that tolerance and excellence require hard cash and supportive education policies. Innovative research needs money; university staff and students need accommodation, library resources and laboratory equipment. Everyone needs time, a commodity that is being squeezed out of the system by the increasing bureaucratic and financial demands imposed by government education policies.

Respondents from EED students mentioned that lecturers are using Arabic and English languages in teaching classes. Lecturers explain subjects to students using Arabic language. However, officially all studying materials provided by EED are in English language. Accordingly, the lecturers provide most of material parts in English including; terms, definitions and other concepts. Also, text books, articles, sheets, and lecture notes are in English language. Respondents from students claimed that they are not offered effective English courses to cope the knowledge given. On the other hand, the students stated that the English language courses offered by the university are not enough to enable them to understand efficiently the required knowledge. This reflects that the department and faculty are not taking in consideration this issue where language is essential factor for understanding the provided subjects. Again the lack of facilities e.g. in this case language laboratories and language centres where professional teachers and programmes are available could be one of the causes behind the students' weaknesses in English language. The finding of using English language and Arabic language by lecturers of EED in their lectures is unique and possibly similar peers in Libyan HEIs, since they have similar system.

7.4 Discussion of Teamwork in Libyan Higher Education

Interviews revealed that the main forms of teamwork in both embedded case studies are faculty board, department board, committees, and group of students working together. In addition, the notion of cross-functional teams is not applied in both embedded cases. On the other hand, university board and faculty board could demonstrate cross-functional teams as members of such boards are coming from different units and specialities.

Based on those findings, it is necessary to understand the difference between the concept of committee and the concept of team. Regarding this point the reader could refer to section 3.3.3. There is no clear understanding among all respondents in both

embedded cases about the concept of teamwork as presented by the quality authors Freed and Klugman (1997) in section 3.3.3 table 3.1. Also, most of respondents believe that working in a group e.g. committee, means working in a team. In addition, all respondents throughout the interviews do not mention teamwork; however “committees” is the dominant term used by them to express working in groups. This misunderstanding between the two concepts leads to misunderstanding among respondents in both embedded cases about the role and the level of effectiveness of each one. There are different committees elected for different tasks in both embedded cases. For example, up dating curriculum committee, managing exams committee, managing conferences and other scientific activities committees. In the first type of committees e.g. where a number of academic members from the department are elected to evaluate and up date the current curriculum offered by the department. All members of such committees are professionals in their subjects and fields, but it is beneficial to involve representatives from key employers of graduates as external members. As mentioned above in section 7.2 those external members could support and enhance the effectiveness of the curriculum by sharing their work related experiences and knowledge. Moreover, it would be valuable if other members from peer departments in other universities, shared the discussion, in such committee where more co-operation and effective communication could be achieved among peers.

A possible improvement, in both embedded cases is that cross-functional teams could be realised at the departmental level while different members reflect different knowledge and skills. That means the committee could be transformed into teamwork where barriers e.g. between employers and department could be removed and strengthen the link between them through efficient matching of those employers’ needs. Also, through a common understanding and co-ordination among peers the quality of educational processes provided by them could be improved. In addition, this will facilitate the movement of students between peer departments, while in this case there will not be major differences between curriculum’s contents provided. Therefore, cross-functional problems could be solved efficiently. The literature review reported through many quality authors the importance of cross-functional teams. Those authors for example, Deming (2002), Kanji (2001), Hackman and Wageman (1995), Seymour (1992), Spanbauer (1995), Chadwick (1995), Jabnoun (2001), and Sallis (2002) stressed the crucial role that can be played by such teams in solving problems, removing barriers, creating learning environment, building cross-functional relationships,

breakdown of subcultures, suggesting more effective ideas for preventing problems, and new ways of simplifying systems.

Respondents from senior leaders in both embedded cases stressed that a department board, as a team, works effectively towards removing barriers and obstacles facing improvement of educational processes. Also, interviews with faculty members and support staff in both embedded cases revealed that they are effective in decision-making at the level of department board since they are members of such board. These findings replicate Oakland (1993), Jabnoun (2001), BS 7850 (1994), and Kanji (2001) who indicated that organisations adopted the team concept become able to create and improve effective communication, removing organisational and personal barriers that could hamper continuous improvement processes, and make efficient decisions. Based on these findings, it can be concluded that the department board demonstrates the notion of open communication while every member is entitled to participate in decision-making. Also, sharing information and knowledge through good co-operation where recommendations are more likely to be realised. That gives the opportunity to the department board to be able to overcome problems, avoid major errors, and effectively improve the processes.

However, such department board efforts have reported where they are faced with lack of independent budget, and administrative bureaucracy. This issue was discussed earlier in section 7.2 where authority and empowerment of senior leaders include senior leaders in both cases are hampered towards providing what they believe is important for improving the quality. This finding is inconsistent with what has been indicated by Freed and Klugman (1997) who emphasised that people who work within the system are closer to the problem and the most who know how organisation works, also they know who are the most capable to change for improvement. Therefore, it is essential to empower them through offering enough budget and facilitate administrative processes.

Moreover, interviews showed that team members (i.e. department board, faculty board, and types of committees) are not offered training to improve their skills as a team. For example, those skills are interpersonal communication, co-operation, and group decision-making. However, senior leaders (SL1 and SL2) and, faculty members and support staff in both embedded cases claimed that some aspects of such team skills are possessed by members of their teams. On the other hand, this could be existed at the level of departments' teams where homogeneity is more clear among the members. For

example, those members are working closely, facing same problems, and have same specialities and area of interest. This facilitates communication and creates a common understanding among them which leads to quick and high quality decisions. Nevertheless, at the level of faculty and university boards the level of homogeneity becomes less where members are coming from different speciality and areas. This is confirmed by the research findings in section 7.2. Those findings showed that there is a lack of understanding between SL1 and SL2, and between SL1 and senior leaders of university because of different specialities. Therefore, team skills are more needed at the level of faculty and university boards than at the level of department boards. The cases at levels of faculty board (EF and LF) and university board (Al-Fateh University) are contrary with what has been indicated by Jabnoun (2001) who states that cross-layered teams (cross-functional teams) are common in academic organisations where status differentiation is limited. Jabnoun adds that such teams combine the conceptual skills of members and reduce status differentiation.

Interviews revealed that both embedded cases responded differently regarding the importance of encouraging their students to work in teams. In EED, the department head as well as faculty members and support staff believe through their experiences that working students in groups was not successful. They claimed that all members of the group are relying on one member to accomplish the work. This is also confirmed by EED students. Faculty members and support staff from EED found difficulty to assess each individual student in such groups fairly.

Nonetheless, this reflects that there is misunderstanding among academic staff in EED includes SL2, faculty members and support staff about the notion of teamwork in general and at the level of students in particular. This issue was discussed at the beginning of this section. On the other hand, Chadwick (1995) who mentions that teams are able to create co-operative environment at different levels on the campus include teachers, executives, and stakeholders. Chadwick adds that in classrooms, laboratories, and lectures halls students should be encouraged to work in teams and skilled to use problem-solving techniques which help them exchange information and learn from each other. According to Chadwick, the notion of students working in teams should be exploited to enhance students learning.

Respondents from faculty members and support staff in EED stated that the difficulty behind assessing each individual student in group fairly e.g. in experimental work is that

the group rely on one member to accomplish the work. This includes taking the results and writing the final report. However, it can be concluded that this is not strong reason to judge the importance of working students in teams. This indicates that there is a problem in the students' assessment methods used in EED. On the other hand, discussing and investigating the way(s) of assessing individuals within teams is out of the scope of this research. However, the concept of teamwork is wider while it offers team members the ability to judge and discuss the problem(s) in open communication environment. For example each student in such environment can express his/her own knowledge, thought an understanding of the subject. Students in this case can learn how to think and make decisions as a group. Also, students exchange information and skills where integration among them as team members could be realised and enhance the learning process. Working in teams gives students opportunity to suggest more ideas, the ability to compromise the solutions and alignment of the available resources towards realising the goal(s). Also, encourage students how to work effectively in teams, thereby producing individuals with team experiences prior to entry in the world of work, which will most likely include teamwork.

The research findings revealed that SL2 (EED) agreed with what has been mentioned by faculty members and support staff regarding assessing students as individuals in teams. Nonetheless, SL2 mentions two reasons behind working students in groups (teams) in EED. Those reasons are the shortage of equipment required for experimental work and increases in students' number in the department. However, those reasons are mainly due to logistic problems encountered the department and do not indicate the belief of SL2 regarding the importance of working students in teams.

On the contrary, SL2 in SSD claimed that working students in teams is required by the nature of the area of social services. For example, students (mainly females) who live in the same area are encouraged to work in teams to study social issues related to their subjects. In addition, one faculty member claims that student teams are assessed at the level of team not individuals. This finding demonstrates that what has been mentioned earlier by Chadwick (1995) can be incorporated into the learning. However, in general faculty members and support staff in both embedded cases could benefit from the above discussion regarding the vitality of teams include student teams and understand that putting students in groups it does not mean that such group will demonstrate effective teams. Formulating certain roles for such groups could be useful where the work of such groups would be more organised and ensure that everyone has a chance to participate.

7.5 Discussion of Open Communication in Libyan Higher Education

Despite stating earlier that senior leaders, in both embedded cases are demonstrated the ability to be good listeners, (section 7.2), interviews revealed that there is a general agreement among respondents from senior leaders, faculty members and support staff that communication processes in both embedded cases are ineffective. They commented that in general there is a lack of clear shared understanding of objectives stated by both embedded cases. This indicates that there is a lack of effective open communication among different segments in both embedded cases including senior leaders, faculty members, support staff, and students. When discussing quality in HEIs Freed and Klugman (1997) and Wells (1997) state that good and open communication are essential to connect all staff and create an atmosphere among them in which everyone works to fulfil and share an understanding of the objectives of the institution. Hence, it is unlikely in the two embedded cases that staff will be connected to any great degree of shared purpose.

Furthermore, the above research finding, also confirmed by many faculty members in both cases indicated that departments' meetings are not convening in regular periods. In addition, most academic staff including faculty members and support staff are not attending such meetings, because they are engaged in external jobs e.g. consultancy or as part time lecturers in other HEIs in order to increase their income. Such absenteeism of many staff members leads to minimise their contribution in discussing department issues, hence the quality of decision-making and the effectiveness of solving problems are influenced. Also, sharing information, knowledge, and possibility of creating new ideas has become less in such situations. This reflects a poor communication climate such as indicated by King (1991) in literature review who mentioned that one of the poor communication characteristics is communicating with only few people. Srikanthan and Dalrymple (2004) also emphasised that high quality performance stresses the involvement and active engagement of academics with the institution through discussion, arguments, and open communication. Freed and Klugman (1997) stated that for effective communication processes people must be able to share information with others and stress the value of feedback. So because this is not mainly happening in the embedded cases then effective communication is not present.

Additionally, at the students level e.g. in EED, students mentioned that communication with their lecturers depends on the lecturer's personality and mode, while some of them demonstrate good listening and co-operation, some of them not. Also, students in EED

noticed that there is a lack of co-ordination and communication among lecturers who provide same course to different student groups, since students found major differences in the material provided. Beside these findings the research revealed that both embedded cases failed to build effective communication links with their students through the lack of efficient understating of the students' survey role which has been discussed in section 7.3. Even the box created by LF for students' opinions and/or complaints failed to provide minimum requirements of communication with students (see section 7.3). However, in the absence of effective communication in both embedded cases students feel isolation, while a good communication process unites all levels. Also, maintaining awareness of students' requirements and expectations is essential to improve educational services. This could be realised through taking into account gathering necessary data and information from students, for example, using approaches such as focus group, interviews, and questionnaire. Accordingly, attention and listening to students would be enhanced, this strengthens the relationship and creating effective communication links with them. Those approaches are in harmony with MBNQA (2004) which emphasises that HEIs should build relationships with their students and determine the key factors that lead to their satisfaction, loyalty, and persistence in order to improve educational services and programmes.

Based on the discussion mentioned above regarding ineffective communication process encountered both embedded cases, it can be concluded that such ineffectiveness impacts negatively on the possibility of getting remarkable feedback from stakeholders in general and from students in particular. However, a successful communication process gives opportunity to people to express their opinions and ability to criticise the system. This offers more consistent information to senior leaders about the system where their plans and decisions become more robust. Also, it supports and enhances the integrity within the organisation where everyone is entitled to contribute and share new ideas in which processes could be improved. Feigenbaum (1991), Besterfield et al (2003), and Freed and Klugman (1997) likewise stressed feedback as an important factor in an efficient open communication process where information could be shared and problems could be solved properly. Also, improving feedback would allow senior leaders to be familiar with aspects of different processes and this helps them to build their decisions based on more complete facts.

The interviews demonstrate some good practices that both embedded cases used a number of traditional communication means to communicate staff members and

students. Those are letters, phones, notice board and announcements. Very recently EF used a newsletter as another means for communication. However, the internet as a modern communication tool was not available in both embedded cases. Despite a variety of communication means used in both embedded cases, the question is to what extent those means are used effectively? The research revealed that announcements are used in both embedded cases mainly to communicate with students. Respondents from students in both embedded cases answered the question above at least partially where they noticed that department in general and, faculty members and support staff members in particular are using a lot of announcements. Students found it difficult to follow them effectively which leads to students' misunderstandings. Also, some of these announcements are found with no dates and not coherent with their messages.

Additionally, during the researcher's visit of both embedded cases to conduct interviews, he noticed that many announcements are attached everywhere, without a clearly designed system e.g. on walls, doors, windows, and notice boards. These findings confirm that communication process in both embedded cases is ineffective. The increases of students' numbers encountered Libyan HEIs including both embedded cases and besides the absence of internet, communication process becomes more difficult. This is confirmed by the research findings through one faculty member from EED who mentions that weaknesses of communication in the department and the absence of internet make many issues inaccessible. However, it is important to remove barriers among HEIs segments through providing necessary requirements and facilities where flow of information could be enhanced. On the other hand, facilitating flow of information through effective and open communication could lead to remove barriers and obstacles that hinder different processes at all levels in organisation. Deming (2002) likewise stated that barriers should be removed between different organisation's areas in order to facilitate flow of information.

7.6 Discussion of Education and Training in Libyan Higher Education

Research findings revealed that there is a general agreement among senior leaders, faculty members and support staff in both embedded cases that there are no training programmes offered by both embedded cases to their staff. Also, there is no evidence that the university provides any training programmes for their staff at all levels. These training programmes such as teaching methods, course design, evaluating or assessing educational programmes, assessing students' performance, and using quality tools and techniques to improve their jobs. These findings are consistent with what is stated by

Libyan educators Said *et al* (2004) in chapter 4 who emphasised that despite specialised scientific skills of teaching staff in Libyan universities, most of them are not educationally trained for the teaching process. In the same context Zhang (1997) indicated that there is an agreement among quality gurus includes Deming, Juran, Crosby, Feigenbaum, and Ishikawa about the fundamental role of employees' education and training. For example in changing employees' attitudes, beliefs and provide them with capability to carryout their jobs in effective way through accepting new changes towards quality improvement. Martin (1993), dale and Bunney (1999), Oakland (2000), Spanbauer (1995), Venkatraman (2007), in addition to MBNQA (2004) emphasised the importance of education and training for all staff at all levels in organisation.

Based on the discussion given above, organisations include HEIs should consider staff education and training as necessity and 'need to do' while effective people development has become a strategic priority. However, in traditional management thinking employee training is considered as unnecessary expenditures and a waste of money (Martin, 1993). On the other hand, training for quality improvement should be supported by organisation's senior leaders to meet their expectation. Nevertheless, the research findings revealed that the university does not offer any education and training plan for their staff. This finding is confirmed by SL1 (LF) who states that the university should offer a plan of training programmes for its staff members. This indicates that there is a lack of understanding among university senior leaders about quality initiatives (discussed in section 7.2) which could lead them unable to carry their responsibility towards improving university's activities. The lack of such understanding among university senior leaders reflects that they have a lack of training in how this can improve the quality of processes provided by the university. This is similar to the views expressed by Lewis and Smith (1994) who mentioned that managers who have been not trained in how to improve the quality system is the main reason behind the failure of quality improvement efforts. Additionally, Osseo-Asare and Longbottom (2002) emphasised in their empirical study that university top-management include deans, assistant deans, and head of departments should be educated and trained in TQM philosophy where their involvement and commitment could be enhance towards the quality programmes.

Additionally, interviews demonstrated that senior leaders agreed that staff in both embedded cases is in need of training to improve their skills and abilities. This finding is consistent with other Libyan educators include Alfnish *et al* (1998) and Alhawwat *et al*

(2004). Those educators indicated that skills and abilities of academic staff in Libyan universities need to be improved through offering them training programmes where special centre should be established for this purpose. In the same context and on individual bases one faculty member (EED) mentions that some faculty members in the department are trying to improve their skills and knowledge using self-learning.

Based on these findings and previous findings in this section, training in people skills was seen by respondents as very important in order to improve quality services in both embedded cases. However, a consistent strategy for education and training programmes in which individuals needs could be aligned with institution's needs and objectives is required. This would offer opportunity for staff members to improve and fulfil their skills within the institution's needs. Accordingly, success could be achieved both at the level of individuals as well as at the level of institution. One of the important aspects that can play crucial role to realise such success at both levels is to educate and train university staff members in the concepts of quality including quality tools and techniques. This direction is advocated from quality author Spanbauer (1995) who mentions that education and training programmes should comprise all university levels and directly related to the professional development needs of everyone. Also, he emphasises that faculty and staff need to be trained in TQM philosophy and its tools and techniques. At the Libyan level, Libyan educators include Alhawat (2005) and Al-Turbagya (2005) mentioned in chapter 4 that Libyan HEIs should train their staff on quality methods and create committees for such purpose.

Research findings demonstrated that few attempts of providing courses towards improve skills of academic staff have been unsuccessful at the level of LF and SSD. SL1 (LF) points out that LF offers a computer course for their academic staff. However, the attendance was very low, accordingly the course was cancelled. Also, SL2 (SSD) mentions that he offers programme named "Senior and Junior" aims to strengthen the communication and co-operation among academic staff members from old and new generations in the department. Nonetheless, both attempts are come a cross with culture issues where in the first case participants from academic staff do not accept to go back to the class as trainees. In the second case the new generation of academic staff members think that they have same experience and skills as old generation since they have same qualification (i.e. MSc. PhD). These findings are likely to be unique within Libyan HEIs since they were not identified in literature review. Another attempt was offered by one of the faculty members in SSD as short course in SPSS (Statistical

Package for Social Science) for faculty members and support staff in the department. It was claimed by the department board that no time was made available for this course in the schedule of faculty members and support staff. Also, SSD offers one English language course to their support staff who expected to complete their postgraduate studies abroad. At the level of EED the research findings revealed that only a few short training courses for special occasions are offered to their support staff. Those courses are given by producer companies who provide some technical laboratories and equipment to the department. Participants of support staff learn in such courses how they operate and use that equipment.

Based on those above findings and discussion, this research suggests that such courses were unsuccessful either due to cultural aspects or/and availability of time. Despite the good intention and awareness of senior leaders or/and faculty members regarding the need for training and improving the skills of academic members, such attempts did not emerge from a general strategic plan nor where the courses offered based on analysis of strategic needs or individuals and institution's needs. According to respondents, there is no evidence of analysis or investigation of reasons behind the failure of such courses in order to identify barriers and obstacles that hinders those attempts. Literature shows that this will give opportunity to learn from previous problems and avoid such obstacles in future. Accordingly, the quality guru Ishikawa (1985) stated that the success of an organisation is highly dependent on treating quality improvement as a never-ending task. Likewise, the quality guru Deming (2002) in his cycle PDCA (Plan, Do, Check, and Act), is consistent with quality author Oakland (2000) in his cycle of continual improvement EPDCA (Evaluate, Plan, DO, Check, Act). Both cycles enhance never-ending improvement where they ensure that organisation learn from results, and improve operations and hence outputs. This embedded case studies situation analysis on continuous professional development and staff improvement suggests that Al-Fateh University is not maximising or supporting strategically on attempts to improve.

Furthermore, the literature research revealed that knowledge and education are important for all institutional members. Accordingly, literature indicates it is confident to say that members who have professionally developed in quality principles, tools, and techniques have a deeper understanding of quality improvement. Such understanding almost always leads to higher level of commitment and determination to continue improving activities, processes, and systems. Based on this discussion using quality tools and techniques (some of them are presented in table A.5 in appendix 1) are helpful

and enable users to create comprehensive picture about the analysed situation(s). Using effectively such tools and techniques lead to high quality decisions and build improvement processes on facts. This is consistent and agreement with many quality authors, for example Sallis (2002), Dale and Bunney (1999), Goetsch and Davis (2003), Spanbauer (1995), Mehra et al (2001) in addition to BS 7850 (1992) who emphasised the importance of quality tools and techniques in problem solving, decision-making, improve the work processes, and results in better ideas and solutions. Also, those authors are accentuate that organisations should offer and facilitate quality tools and techniques training programmes to their members at all levels. However, it is obvious from respondents that quality tools or techniques are not widely used at any level within Al-Fateh University (AFU).

7.7 Discussion of Reward and Recognition in Libyan Higher Education

The definitions of reward and recognition were given by Juran and Gryna (1993) in section 3.3.6. Investigation of such aspects in the related Libyan legislations' documents revealed that there are regulations called "Regulations of National Libyan Universities' Academic Staff Members, No. 199 issued in 2001". These regulations consist of seventy two articles in five chapters as follows:

- General Provisions
- Appointment (recruitment), Deputies, Relocates, and Hires of Academic Staff Members
- Holidays
- Punitive or Disciplinary Regulations
- Other Related Provisions

Additionally, articles 9-16 deals with requirements of academic staff recruitment and promotions. However, article (17) states that regardless of articles 9-16 a staff member could be encouraged but only by offering him one exceptional academic promotion during his work. Such promotion is based on recommendation from the related department and faculty. In order to accomplish the exceptional promotion, staff member should fulfil two requirements:

- Staff member should pass at least the half time required by standard promotion.
- Staff member should achieve double of scientific research activities required for standard promotion.

Article (34) states that university public committee proposes the rules of both immaterial (moral) and materialistic (tangible) incentives and motivations. Such rules

should be approved by General Public Committee. In addition, article (34) recognises a staff member who offers excellent work or/and who works away from his home. Also, article (35) states that any staff member works maximum 10 hours weekly over his regular job should be given bonus based on the related regulations. Article (37) states that any staff member works in any related academic committee should be rewarded bonus based on number of hours or number of meetings.

Despite the complexity and breadth of those Articles, the research found there is no evidence in the Libyan HE legislations or regulations about rewarding excellent teaching. On the other hand, the quality of a university depends on the quality of the conditions for learning, teaching and research that it offers and to the value it attaches to all these three aspects. Traditionally, universities have focused on research qualifications when promoting and rewarding their teachers and recruiting new teaching staff and paid lip-service to teaching qualifications. However, in Libyan HE legislations, teaching qualification is not one of the requirements when recruiting or employing new academic staff in Libyan HEIs. In such legislations Article (18) indicates that there is a special committee for evaluating scientific activities of academic staff member(s) who fulfil promotion requirements or who need to be recruited. Most likely these activities are in research and publishing areas include papers, supervision, consultancy, and text books. However, teaching qualification is not one of the requirements for these two purposes. Research revealed in section 6.6 that most of the teaching staff members in Libyan universities are not educationally trained for the teaching process. Accordingly, most of them lack teaching qualifications. Furthermore, there is no reward or recognition system in place to encourage or motivate staff to pursue teaching and learning qualification.

Hence, it was found that Libyan HE legislations are not rewarding and recognising the excellent teaching. This finding is confirmed by interviews where SL2 (SSD) states that there is no clear criterion for evaluating, rewarding and recognising excellent work in Libyan HE legislations. Also, both respondents SL1 (EF and LF) pointed out that there is no criteria adopted in both faculties (EF and LF) for rewarding and recognising good quality teaching.

Comparing that issue to other countries HEFCE (2002a) and the BRITISH GOVERNMENT WHITE PAPER (2003) stated that high quality teaching must be recognised and rewarded in order to increase the status of teaching and learning. Also, the literature showed that best practice from excellent teaching should be shared to help

those with the potential to achieve high quality. On the other hand, the question that could be emerged in this case is ‘what are the criteria that could be used to evaluate teaching process in order to reward and recognise high quality teaching’? The challenge facing universities include Libyan universities is how to improve the quality of teaching and learning with the shrinking budgets and increasing number of students. Accordingly, it is difficult in university practices to standardise teaching, and it is more difficult to guarantee that all teachers will meet a specific standard. Even when there are standards for teaching, no one can assure that achieving these standards would lead to good learning. Hence, it is difficult to answer the above question which leads reward and recognition in HEIs to become more debatable issue. Badri and Abdulla (2004) indicated that in HEIs reward and recognition subject is a challenging and controversial subject which is exactly what was encountered by the two embedded case studies. On the other hand, Badri and Abdulla suggested that teaching evaluation should be based on many aspects include student evaluation, course materials, developing materials, and evaluating learning, but as discussed in the previous section no evaluation process was evident. Based on this discussion it could be deduced that the absence of reward and recognition of excellence teaching from Libyan HE legislations might be due to difficulty in standardising teaching. However, there is no evidence that Libyan HE attempts to form any guiding standards for teaching.

Respondents from both embedded cases including senior leaders, faculty members and support staff are agreed that the reward and recognition system has been unsuccessful and ineffective. They added, because it frustrates any intention or desire toward good initiatives, while it treats people who work hard and those who do not work hard equally. However, these findings reflect that there is a lack of understanding among university leaders about the importance of the role that can be played by the efficient reward and recognition in motivating and encouraging staff members towards achieving good quality services. Successful leaders understand that people want to be acknowledged and appreciated if they provide new ideas or/and excellent work. This was emphasised by the quality gurus Deming (2002) and Crosby (1979) who stated that everyone wants to be appreciated and this appreciation should be public, dignified, and come from peers while recognition is an essential cause of human motivation. Accordingly, people feel that they are valuable and important for organisation. This will give them enthusiasm and interest towards innovation where excellent work is continually repeated and become habit for them. Because they trust the reward and recognition system adopted by their organisation. Unfortunately, the reward and

recognition methods in the embedded case studies were not respected, thus they were mistrusted.

As long as an effective reward and recognition appreciate people's positive contributions, however people who do not work well and who negatively impact on work processes should be treated differently.

Accordingly, this means that the reward and recognition system adopted by the university (comprises both embedded case studies) is unable to make the people more committed to their job in the absence of good salaries. Supporting that argument Cherrington (1995) indicates that earning money is a strong reason behind the motivation of the people to work hard. Also, people will seek other jobs if their jobs do not provide adequate income.

According to The General Congress of the People (1981), salaries/wages and work incentive systems in Libya are other areas, which receive clear and direct intervention from the government with regard to management systems in the education sector. Since 1981, all the salaries in the public sector institutions include HEIs are calculated according to law no 15 in 1981, which established 16 scales for wages and salaries, with a basic monthly salary ranging from 85 Libyan Dinar (LD) on the lowest scale, to 590 LD for the highest scale, excluding monthly bonuses. These salaries after adding bonuses range from 120 LD to almost 700 LD per month before taxes. The main problem in this issue is that this law has not changed or been adjusted (even for inflation) since it was established about 27 years ago. Hence, from the above findings this factor affected staff members' morale, attitude, confidence and performance, as a result the quality of activities provided by HEIs are affected. As Dearing (1997) mentioned that in the dramatic changes encountered new era, HEIs staff members should be offered sufficient rewards in order to be retained and motivated. It is not surprising staff within the embedded cases are not motivated highly, seeking alternative employment and absenteeism is high.

Based on the discussion given in the previous paragraph, very recently Libyan HE leaders are agreed that in the absence of good salaries for Libyan HEIs staff members cannot retain and motivate those members. Regarding this point the research findings demonstrated through SL1 (LF) who states that in order to increase the income of faculty members, Libyan HE leaders allow those members to increase their teaching load from 8-10 hours to 20 hours a week. Nevertheless, SL1 adds that this makes

faculty members to obtain maximum hours which lead departments to create any kind of loads for their members to fulfill the requirements regardless of the real needs of such departments. Also, it is found that twenty hours teaching needs more effort, focus, and time to prepare; hence quality teaching is definitely influenced. In view of that, the research activity as an essential part of faculty members' job is hampered and quality of teaching is sacrificed. Also, this finding shows that what has been provided by Libyan HE leaders to solve the problem of salaries was unsuccessful. In fact it creates more problems which affect the quality of the whole educational process. In addition, research activity, as one of the significant roles of the university, is negatively impacted in general and the role of faculty member as a researcher in particular. However, reward and recognition are influential concepts which need to be exploited and used by leaders to support quality processes.

Therefore, there is a lack of strategic planning among Libyan HE leaders while the problem of salaries should be treated in integral and complement way with other activities of HEIs. Supporting this recommendation is the work of Shaw (1999) who indicates that reward and recognition system should align both strategic goals and objectives of organisation with individual objectives and needs.

Finally, the research revealed that the jurisdictions of senior leaders both at the level of department and faculty in both embedded cases are limited for rewarding or recognising effectively any excellent work. It can be concluded from such research findings that the university leadership is the only body that has complete jurisdiction and authority to reward and recognise excellent works. This reflects the centralisation of decision-making which makes reward and recognition processes bureaucratic and a long procedure. Senior leaders at all levels of department and faculty are working more closely to the system; hence they are more able to identify who deserve recognition. Therefore, giving them more jurisdictions is most likely to achieve a successful reward and recognition system.

7.8 Discussion of Commitment to Quality in Libyan Higher Education

Despite awareness among most respondents in both embedded cases that commitment to quality is essential, those respondents believe that commitment to quality is strongly influenced by the absence of an effective infrastructure, for example, adequate buildings, laboratories, good libraries, information networks, and independent financial resources. The same respondents consider that university senior leaders are not efficiently carrying out their responsibility and commitment towards achieving

continuous quality improvement (CQI). The problem of infrastructure encountered Libyan HEIs including Al-Fateh University is discussed in section 7.2.

This practice is contrary to best practice according to many quality gurus and other authors. For example, Juran (1989), Crosby (1979), Feigenbaum (1991), Lewis and Smith (1994), Hansson and Klefsjo (2003), Kanji (2001), Scarnati and Scarnati (2002), Gordon (2002), Kadasah (2002), and Martin (1993) who stressed the importance of leadership commitment as a critical factor towards achieve high level of quality and creation of quality culture. On the other hand, many authors such as Feigenbaum (1991), Lewis and Smith (1994) gave a broader concept of organisation(s) who demonstrate commitment to quality. Feigenbaum points out that besides essential leadership commitment in such organisations, also commitment should include staff participations, information system, evaluation, communication, and using quality tools. Lewis and Smith stated number of points which indicate that HEIs should follow to exhibit real commitment to quality for example, form quality progress teams, report recognise and reward success, and establish motivation for those unwilling to commit to quality and excellence. However, the research revealed in previous sections that Al-Fateh university through both embedded case studies does not demonstrate most likely all what has been emphasised by Feigenbaum (1991), and Lewis and Smith (1994). Therefore, the university through its leadership practice, lack the required commitment to quality. In addition, it reflects inability and failure of university leadership to create a quality culture.

Yet, these findings revealed the shortage in infrastructure and resources could affect the staff commitment towards providing a good quality job. However, staff members should have the necessary resources to perform their tasks effectively. For example, involving the use of technology in teaching and learning, Internet access, information system, good library, entertainment facilities and accommodation would motivate staff and students alike. On top of that, the university should demonstrate its responsibility and commitment towards offering training programmes to the staff at all levels. Providing enough necessary resources would facilitate many processes, including educational and administrative processes where services and activities could efficiently carried out. Thus, the loyalty of staff members could be sustained; hence, they will be more committed to their jobs. In this context, quality authors Freed and Klugman (1997) and Seymour (1992) mentioned that lack of adequate resources include necessary financial resources make it difficult to get the movement off the ground and continuously support

quality enhancement efforts. They added that lack of sufficient resources are constraints that make it difficult to deliver the service as expected.

In order to have deep understanding of the infrastructure problem encountered Libyan HEIs include Al-Fateh University, it is important to discuss this issue from a simple cause and effect point of view. However, Libya as one of the developing countries has undergone tremendous change over the past 30 years. The Government has utilised its oil wealth to change the face of the country. For example, in factories, schools, universities, hospitals, highways and airports have been built to international standards. Water, telephone and electrical networks have also been considerably expanded to cover almost every habitable spot in the country (NAID, 2002). It is clear that the above infrastructure needs to be well maintained and sustained in order to keep it in a functional condition. Over the past decade, due to the fluctuation of oil prices and considerable effect of a UN embargo on Libya, which started in 1992, the country's income has decreased considerably. Therefore, the budget allocated for infrastructure and infrastructure maintenance is limited. Accordingly, Libyan HEIs infrastructure is not isolated from such situation. Thus, the state in general and Libyan HEIs in particular, will have to sustain the existing infrastructure as long as possible. On the other hand, increases in student numbers added more load on the existing HEIs' infrastructure include available facilities. Therefore, in the future there will undoubtedly be some accumulation of unfulfilled infrastructure need. Hence, the general performance of educational processes in Libyan HEIs could be affected, accordingly it is difficult e.g. to fulfill the expectations of faculty members and students. However, commitment to provide a good quality job from staff members becomes less.

Based on the discussion above and according to the researcher's experience who spent more than twenty years as a staff member and lecturer in one of Libyan HEIs and a part time lecturer in many of such institutions, some of these HEIs have considerable facilities, particularly in the applied science for example in the engineering field. Accordingly, Libyan HEIs peers can work together to bridge the gap and shortage of infrastructure includes laboratories. This could be achieved by establishing a high level of co-operation and co-ordination, where a network is required among HEIs who are located in the same area. In this case students can move easily and their opportunity to accomplish and fulfill their practical knowledge becomes better. Likewise, lecturers can remarkably balance between the theoretical and the practical side when made available such facilities hence improving quality of teaching. On the other hand, strategic

guidance is required particularly in this case, when competing for limited resources. Also, improvement could be made by establishing effective communication links with other institutions e.g. public and foreign companies who are interested in the same area is required. Such link would be useful where those institutions can contribute in supporting HEIs through providing some facilities which help students accomplish their final projects and improve their practical skills.

Additionally, the research findings revealed different aspects in both embedded cases which reflect commitment to quality as well as lack of commitment to quality. In EED, aspects which reflect commitment to quality e.g. when it offers new teaching facilities, and SL2 (EED) contact some companies in order to help the department through offering some laboratories' equipments and devices. In SSD those aspects comprise connection with number of peers in different countries to discuss and adopt some programmes in order to renew the curriculum provided by the department. Also, SSD emphasise that students' final projects should be related to real social problems as much as it can. Also, respondents from both embedded cases consider reviewing and renewing courses' contents from time-to-time is the most aspect that reflects their commitment to quality. However, it can be concluded from such findings that those aspects can not be considered as an evidence of practicing commitment to quality in both embedded cases while such aspects do not demonstrate many of what has been mentioned earlier by Feigenbaum (1991), and Lewis and Smith (1994). In addition, those aspects do not clearly fulfil the necessary needs for both embedded cases to provide good quality in order to be committed to quality. On the other hand, many responses confirmed lack of commitment to quality in both embedded cases. For example, respondents in EED said many experimental works could be cancelled or delayed due to the inefficient maintenance procedure and related bureaucracy of administrative procedures. Also, most of the academic staff members in EED (members of department board) did not attend regularly meetings of the department board, which affects many administrative and educational processes as section 6.2.7 indicates. In SSD many plans had been suggested by the department board towards enhancing different academic activities which have not been succeeded because of the lack of procedures and high bureaucracy.

Based on those findings discussed above, it is clear that both embedded cases encountered lack of commitment to quality. Also, it shows that there is a lack of understanding among senior leaders both at the level of the university and at the level of both embedded case studies regarding quality concepts and initiatives. Incidentally,

Freed and Klugman (1997) stated that once people understand quality principles and practices, they are personally committed to seeking out improvements to make. Thus, further supporting the need for academics in the case study organisations to gain knowledge of quality management is required. Also, it can be concluded that the lack of many quality aspects come a cross both embedded cases e.g. effective communication process, training programmes, efficient reward and recognition system, and using of quality tools and techniques are considerable factors behind their failure to commit to quality.

7.9 Discussion of Measurement in Libyan Higher Education

Research findings (section 6.2.8) revealed that there is very little evidence of measurement by Libyan HEIs includes Al-Fateh University to evaluate or assess their provided programmes or services. In addition, there is no evidence that these institutions used either internal or external units such as agencies or auditors for assessing their provided activities. Accordingly, feedback obtained from senior leaders in both embedded cases showed that there is no approach adopted, either at the level of university or at the level of both embedded cases, for assessing or evaluating their provided activities. Porter and Yergin (2006) confirm this situation as they report there is a lack of accurate, standardised, reliable and objective information on Libyan educational quality. Porter and Yergin added that the quality issues encountered the Libyan education stem from two sources:

- First, the problems with the quality of inputs e.g. curricula, teachers and educational infrastructure.
- Second, a number of structural issues which include; a lack of reliable and objective standards, no central body to provide overall planning and monitoring, inefficient allocation of public resources, and a lack of resources in specific areas.

However, the literature in section 3.3.8 shows measurement is very significant process, which plays a vital role in the evaluation of organisations' activities and services of HEIs. According to the above discussion this process is absent in the Libyan HEIs include Al-Fateh University. An organisation needs to carry out an effective review how it is currently work. In this case, organisation need to collect data to measure its performance, and such data could be used as a benchmark for future performance.

Many authors in the literature review. For example, Kanji (2001), Oakland (2002), Besterfield et al (2003), Geddes (1993), Juran (1989), Goetsch and Davis (2003), Owlia and Aspinwall (1996), and BS 7850 (1992) emphasised that organisations including HEIs should develop measurement system in order to measure their performance. However, one senior leader points out that the only evaluation taking place is during involvement in the daily activities and events, where issues and things are compared to discuss later.

There is however, a general agreement among senior leaders and faculty members in both embedded cases that the curricula offered by them is reviewed and assessed periodically as section 6.2.9 indicates. In both embedded cases, there is a committee from a number of academic staff for this purpose. But in many occasions such evaluation or assessment is carried out according to the belief of subject's teacher(s), and usually the department board approve such evaluation. These findings might reflect a self-assessment aspect. Nevertheless, it can be seen that such processes of evaluation revealed by such findings are not based on a certain criteria or existing model in order to achieve an effective review of processes, activities and services provided. However, BS EN ISO 9000:2000, Oakland (1993), and Thiagarajan and Zairi (1997) mentioned that self-assessment is a complete and systematic review of organisation's activities against a set of criteria or a model of excellence. They added that this will give the organisation a good opportunity to identify weaknesses and strengths of its provided processes and where enable to improve them. Furthermore, in order for an organisation to carry out self-assessment successfully it is important to train their staff at all levels on how to accomplish that. However, research findings revealed that both senior leaders at the level of faculty indicated that there are no self-assessment training programmes offered by the two faculties to their staff members. Thiagarajan and Zairi (1997) stated that it is crucial to provide necessary training to make self-assessment effective, hence, if training was provided for case study organisations' senior leaders and to the whole organisation it would help identify and monitor quality problems and efficiently allocate available resources to develop quality.

Moreover, it is clear that most evaluation revealed by the research findings above are likely to be taken on an individual bases either through assessing daily issues and events encountered the department or through evaluation of curricula. However, such evaluation aspects are very limited while they are not based on critical data and information. Also, such aspects do not consider the expectation and needs of e.g.

students and labour market. Hence, actions or decisions based on such aspects could not be effective. According to the work of Oakland (2002) regarding inappropriate evaluation where aspects such as customer perspective (internal and external) tracking performance in single isolated dimension, and producing irrelevant or misunderstanding information shows that the measurement and evaluation processes appear to be inadequate in the case study organisations.

Additionally, the research findings showed that there is no particular criterion used in both embedded cases to evaluate academic staff members' performance. As mentioned by senior leaders SL1 and SL2 that the only way available to know that is through students' complaints where some aspects of the teacher's behaviour or performance could be known both at the level of department and faculty. On the other hand, despite effectiveness of students' feedback for evaluation of teaching process, and based on the discussion given in section 7.3, it was found that both embedded cases are unsuccessfully listening to their students. Both embedded cases failed to apply the student survey effectively. Accordingly, assessing teaching processes through students' opinions has been ineffective. Furthermore, SL2 indicates that at the end of each semester a teacher/lecturer has to provide a report about his subject. This report should include problems faced by the subject, amount of materials covered, and students' performance. If the report indicates that less than 80% of the provided material is covered, then the subject should be offered and repeated again next semester. However, this way of assessing the teaching process as well as the course or subject's success is inefficient due to two reasons.

1. The report is offered by a teacher at the end of each semester where the results or the outcomes of such report would not be used to undertake problems facing the subject.
2. If only less than 80% of course material is covered most likely the course will be repeated again which means waste of teachers' and students' time and efforts.

On the other hand, it could be beneficial if such a report is provided at different periods during the course time. This will help understanding effectively the causes where more opportunity would be obtained to tackle problems and prevent failure or defects. In addition, it would reflect the continuous improvement notion, while the outcomes of such a report are used to prevent current problems as well as improving the processes in the future.

Moreover, research findings demonstrated that students' evaluation in both embedded cases is carried out using mainly traditional examinations. However, SSD offers different types of students' assessment through e.g. essays, individual or team presentations, and oral exams. However, such diversity of students' assessment in SSD has become very limited due to increases in students number. Additionally, the field training report in SSD is considered crucial in students' performance assessment where such assessment is accomplished through external institutions. Those external institutions are predominantly hospitals, schools, and jails. This assessment undertakes completion of a special form prepared by the department completed by those institutions where information about student training field work is provided. Also, students are assessed through their class attendance and general behaviour. Furthermore, the research findings, section 6.2.8 revealed that students in both embedded cases believe that diversity of assessments is more reliable and effective for student to demonstrate his/her real performance and academic level rather than just exams. Additionally, many Libyan educators e.g. Alfnish *et al* (1998) and Abozakhar (2006) criticised the students' assessment methods adopted by Libyan HEIs. Both those Libyan educators mentioned that traditional exams are the main method of student assessment in Libyan HEIs. Abozakhar (2006) adds Libyan universities should seek an effective approach to assess their students that encourages them to gain knowledge in a more effective manner.

Based on these discussions, it was mentioned earlier in this chapter that Libyan HEIs have witnessed increases in students' number; such increases are beyond the capability and facilities of these institutions. This issue affects the role of those institutions towards providing good services such as reliable students' assessment approach. Due to the large size of classes and the teacher's load typically have large classes, it becomes difficult to facilitate correction and provide diversity of students' assessment methods. Also, in such situation teachers rely mainly on traditional lecture methods where the role of the teacher is to lecture and students are expected to attend classes, listen to the instructor, and take notes. This classical style is considered adequate for graduation of large numbers of students with minimal thinking and analysis skills. Also, it has been very successful in graduating thousands who join the unemployment club because they lack the skills required by the labor market. According to Race (1995) traditional exams as the only method of assessing students' performance, regardless of its advantages which mainly lie in equality of opportunity, is that the answers are provided by the candidates and not by other people. However, traditional exams have considerable disadvantages as students get little or no feedback, most exams encourages surface

learning, and it measures how good students are at answering questions rather than how well they have learned. However, Race argues that the variety in methods of assessment, the fairer assessment is to students.

Therefore, traditional exams as the main assessment method are affecting the learning process in Libyan HEIs as students have no chance to get feedback from their teachers about their performance. Usually in such exams the student's performance is evaluated through a quantitative figure (i.e. mark). In this case students will not be able to learn e.g. from their mistakes and misunderstanding of exams' questions in the absence of discussion with their teachers about this issue. Hence, students could fail by making the same mistakes again in future exams. On the other hand, it is difficult for teachers to offer appropriate discussion with their students due to the large number of students encountered with Libyan HEIs. However, enhancing the discussion between teachers and students would lead to creating an efficient communication environment. Also, the learning process would be reinforced and supported while students learn how to evaluate their work through teachers' comments and advices. Gradually student self-assessment would be developed where students become able to judge and improve the quality of their work. In this respect the research suggests that it could be beneficial if Libyan HEIs offer an assistant teacher (lecturer) that works as a tutor to co-operate with the main subject's teacher. The main job of this tutor is to discuss with students either individually or in small groups different issues encountered the subject includes their performance. In addition, Libyan HEIs should offer different types of exams where assessment of their student's performance becomes fairer. Also, it realises students' desires to have variety of exams and assessment methods as indicated by the research findings above.

Accordingly, students can pass their feedbacks to their teachers through two-ways communication where teaching and learning process could be enhanced. Also, students would be empowered and get more involvement in the educational processes where they become able to self-sustained and demonstrate self-assessment. This is in harmony with TQM philosophy which emphasises on self-assessment process. Also, it is consistent with many authors include Robert (1997), Campbell (2000), and Race (2004) who underline the value of student self-assessment as one of the most successful ways of enhancing learning in the class. In addition, students take more responsibility for their own learning and learn how to criticise and improve the quality of their work.

Furthermore, the research revealed that both faculties (EF and LF) do not used any approach or method to assess their activities and services against other excellent peers. These findings are confirmed in a more general way by Porter and Yergin (2006) in their report which indicated that Libyan HEIs are not regularly benchmarked against those of other countries. However, a number of faculty members in both embedded cases used internet to update subjects' material they provided through visiting other universities' websites. These are identified by this research as very limited attempts which have been based on their personal motivation. Likewise, findings show there was no communication with any similar faculties or departments out of or within the country that achieved an excellent performance level. Therefore, there is no chance to share and /or exchange the views and ideas about their activities. Benchmarking and auditing have been shown in section 3.3.8 are vital issues to promote continuous improvement in any organisation. It is seen within the context of TQM as an accelerator towards achieving good quality by learning from the best. This is consistent with Schofield (1998) and Besterfield *et al* (2003) who indicated that benchmarking help organisations to learn from each other and share the best practice. Also, benchmarking helps in identifying and understanding better ways of doing things right.

7.10 Discussion of Continuous Improvement in Libyan Higher Education

The research revealed that there is a general awareness about the importance of continuous quality improvement (CQI) notion among senior leaders, faculty members and support staff in both embedded cases. Also the research shows that there is awareness at other levels regarding this issue such as the general public committee of HE and public committee of the university. In spite of such awareness among such different levels, there is no clear short or long-term approach adopted by both embedded case studies for any CQI processes. On the other hand, the research revealed that a process of continuous improvement exists in both embedded cases but is mainly through a quick and instantaneous evaluation of a daily work processes and actions taking regarding that. Also, curricula provided by both embedded cases are continuously evaluated and improved on periodic bases. Such improvement in curricula is considered at the moment by all respondents the most important aspect of continuous improvement processes in both embedded cases.

For continuous improvement to take place, the awareness among different levels regarding the importance of continuous improvement process mentioned above need to be translated into actions. This could be achieved through providing more understanding

of quality initiatives among those levels by establishing training programmes, visiting excellent peers, and inviting expert people. However, the existence of such awareness and at the same time the absence of a clear approach for continuous improvement in both embedded cases indicated that there is a lack of real commitment to quality. Yet, real commitment could be realised e.g. through working towards embracing the notion of continuous improvement throughout continuous assessment of different processes associated with the assessment of stakeholders' needs. This is the view point of many authors in for example, Dean and Bowen (1994), Baidoun and Zairi (2003), Magd and Curry (2003), Goetsch and Davis (2003), and Jabnoun (2001). Those authors emphasised that continuous improvement means a commitment to constant assessment of different processes and constant seeking better methods. Also, the concept of continuous improvement must be tied to continuous evaluation of customer needs where quality tools and techniques are helpful to identify and analyse such needs. In addition, organisations should make the necessary changes that are consistent with their stakeholders' expectations.

Accordingly, the case study organisations should adopt such practices if they intend to improve quality service. The findings in section 6.2.9 show that dealing with daily events and facing problems in a random way without a clear approach or plan for CQI in both embedded cases made improvement processes difficult and ineffective. Also, the current situation made it difficult to analyse and understand such problems and from such analysis these problems could be eliminated in future in order to improve quality. If improvement is required then Libyan HEIs should adopt a continuous improvement culture where people understand that quality is a never-ending task and commitment to that is required at all levels in the organisation. Accordingly, Seymour (1992), Spanbauer (1995) and, Freed and Klugman (1997) mentioned that the challenge is to develop an organisational culture in which people accept the notion that change must be constant and should be comprehensive and comprise all educational processes. Such a culture was not present in the two embedded case studies, see section 6.2.9.

The research revealed however that there are some aspects of processes improvement in both embedded case studies. For example, EF responded to the changes encountered the secondary schools' curricula by renewing and improving its curriculum in order to match those changes. The new secondary schools' curricula assume that students who will go to university should have a standard level of knowledge enables those students to cope with university curricula. However, in reality it was found that the level of such

students' knowledge in EF was below the required standard level. This situation makes EF and its associated departments face two choices:

- The first choice is to assume that the students from secondary schools have the required level of knowledge needed to cope with the faculty's curricula.
- The second choice is to assume that the students do not possessed the required level of knowledge.

However, the first choice will affect the learning process because students will not be able to cope with new knowledge provided by EF as they lack the strong and the required basic of knowledge for that. The second choice will lead EF and its departments to offer extra courses to those students in order to make them able to cope the EF's curricula. This means a need to spend more time and effort, consequently more money. This possibly indicates that there is a lack of communication between the public committee of education (the responsible body of schools include primary and secondary schools) and universities. Also, the research findings showed public committee of education did not offer training programmes or courses about the new curricula to the teachers of secondary schools. In addition, the public committee of education did not involve universities in the design of such curricula. As a result of the absence of effective communication between public committee of education and universities it could be deduced that the quality of educational processes and programmes offered by both secondary schools and universities are compromised.

However, it is beneficial for Libyan education institutions including primary and secondary schools, and universities to establish a network which offers an environment where better understanding, co-operation and co-ordination among them could be realised. Through such network, universities could be able to understand the desires and expectation of new students. This network should be extended to reach business organisations, the community and social services organisations where Libyan HEIs can build effective partnerships with such organisations. Such partnerships might offer entry into new markets or a basis for new programs or services. Also, it allows to combine the core competencies and leadership capabilities of HEIs with that of partners. Consequently, long-term objectives could be developed which aim at developing collaborative projects and investments. These aspects are emphasised in the literature review by Lambert (2003), Freed and Klugman (1997), and MBNQA (2004) who likewise support the need for effective stakeholder dialogue and shared purpose.

The research clearly revealed in chapter 6 that number of respondents from both embedded case studies emphasised that in the absence of appropriate infrastructure,

training programmes, and the presence of bureaucracy it is difficult to adopt effective approach or strategy for CQI. The effects of those issues have been discussed earlier in sections including sections 7.2, 7.3, 7.6, and 7.8 in this chapter. However, those issues affect the process of continuous improvement in both embedded case studies which is also affected by the lack of appropriate available financial resources at the level of university. Accordingly, the quality guru Juran (1989) mentions in his trilogy that the required infrastructure is needed to secure quality improvement. Juran adds, it is essential to provide the resources, motivation, and training needs for the people. Accordingly, Libyan HEIs including both embedded cases should be able to assess their performance in order to be able to improve it. This could be achieved by highlighting the key indicators of performance. Those indicators could include student learning outcomes, stakeholders' satisfaction, and faculty and staff performance. Also, Libyan HEIs should be able to learn how to measure such indicators and align them with the available resources. That would provide an opportunity to these HEIs to redirect their resources in a more efficient way to prioritise programmes, processes, services, or areas.

Additionally, the research findings demonstrate that both embedded case studies their attempt of continuous improvement is focused on limited aspects of their provided processes. For example, see findings on students' field training in SSD, or the example of contacts German universities by EED outlined in section 6.2.9. However, such efforts should be extended to reach all processes and activities provided by both embedded cases in order to create comprehensive continuous improvement process. In addition, there is no evidence from either cases that they attempted to adopt any kind of measurement approach to improving their provided processes. This indicates that such attempts of continuous improvement carried by both embedded cases are ineffective and at best sub-optimal as they are not based on results of a good measurement approach and they do not take in consideration aspects of other provided processes for realising comprehensive improvement. Though, measurement processes must take place before any improvement attempt the outcomes of all provided activities and processes should be measured based on pre-determined indicators. Such indicators should comprise all aspects of provided educational processes. Such as discussed Spanbauer (1995) and Baidoun and Zairi (2003) who stated that continuous improvement should include all educational processes and must be steadily tied to continuous assessment including stakeholders' needs.

7.11 Discussion of Empowerment and Involvement in Libyan Higher Education

The issue of staff involvement according to section 3.3.10 in decision-making and in day-to-day activities is at the center of Total Quality Management (TQM) philosophy. Accordingly, it is essential to empower the staff at different levels to make decisions and solve problems in their jobs since they are the closest people to the problems. Also, the literature showed staff are in the best position to make decisions for improvement if they have ownership and authority of the improvement process.

Encouragingly, the research findings revealed through interviews with all respondents in both embedded cases that there is agreement and awareness among different levels of Libyan HE about the importance of involvement and empowerment notion. Such awareness from those levels has been seen in many occasions in previous sections about different aspect of TQM. For example, education and training, open communication, measurement, and continuous improvement. This level of awareness could create an opportunity to establish the appropriate environment and a good base for adopting an approach for change towards quality improvement. Also, it could minimise the level of staff resistance which usually associated with such change. In addition, it limits fear that frequently encountered staff during the process of change. These issues have been mentioned in literature review through quality authors including Deming (2002), Juran (1989), and Harvey (1995). Those authors emphasised that staff resistance results from the effect of change in status, beliefs, practices and habits. They added that fear limits staff involvement and the contribution of ideas. Those authors also supports the notion that awareness and communication of change is essential to reduce resistance to change.

Despite such important awareness among the Libyan educators interviewed about involvement and empowerment, the research findings revealed that the university top management does not offer an environment in which people are empowered. For example, people are not given sufficient authority to change and improve the processes. It can be seen from figure 4.2 that representatives of all university segments are involved in the public committee (university leadership). This committee is entitled to lead the university and manage its affairs. However, many Libyan educators include Al-Badree (2006), Alfnish *et al* (1998), and Al-Teer (2006) emphasised that the Libyan HE top management intervene and influence the decisions taken by the university leadership. In both embedded case studies the findings showed that situation to be evident, consequently such intervention affects the decisions taken at the level of university's departments.

In the literature review, MBNQA (2004), Cornesky and McCool (1992), Martin (1993), Sun *et al* (2000), and Kondo (1997) indicated that people must be involved and empowered through giving them a great degree of freedom, facilities and means by which they can achieve the aims. Accordingly, people at different levels could be given more responsibility and provide them with necessary training, information and knowledge. Also, those authors stressed that leaders should empower people by giving them more responsibility, while involvement will remain ineffective and limited to just making suggestions. Therefore, establishing an environment of trust is essential for effective process working, while people will give their best in a culture of trust, involvement and shared values, but this was not evidenced in the findings interviews. Those authors further added that empowerment should be associated with trust in HEIs in order for people to have greater control of their job. But the findings showed that the people's empowerment in different processes was generally hampered. Thus, senior leaders at levels of Libyan HE as well as at the level of university could play crucial role towards helping and supporting people at all levels to be empowered. For the embedded cases this could be achieved through inspiring and motivating the entire faculty members and support staff and encourage involvement, development and learning, innovation, and creativity by all staff members.

The relation between the outcomes of Libya HE and the Libyan labour market has been discussed in section 7.3. On the other hand, this part of this section discusses the relation between both embedded case studies and employers of their graduates. This includes, to what extent this relation allows employers to be involved in educational programmes such as course design and evaluation of educational programmes. Also, to what extent those employers support and help in effective learning for students.

The research findings demonstrate that Libyan educators at different levels believe in co-operation and involvement of employers in HE educational programmes and services. However, the findings also showed the relation between employers and Libyan HEIs is limited and could be classified as weak. This situation is also confirmed by Porter and Yergin (2006) who report that the strong link between HEIs and business which, are typically seen in developed countries, do not exist in the Libyan economy. Also, Porter and Yergin mentioned that Libya is ranked 97th out of 111 countries in university/industry research collaboration, and said that this indicates a serious disconnect between the HE system and the economy awaiting its graduates. On the other hand, the available co-operation and link between both embedded case studies and

employers of their graduates was limited to some aspects of collaboration. Such collaboration includes field training for students of SSD and consultancy offered by EF and its departments to GEC. Also, as the findings show the absence of effective communication and mutual understanding between Libyan HEIs and employers of their graduates increases that the gap and discourages building a bridge of co-ordination and collaboration between them. Indications of such issues have been indicated by a number of respondents including faculty members and employers. For example, the main employers of SSD graduates claimed that the contributions of social specialists are limited in their institutions. One faculty member (SSD) claimed that there is a misunderstanding among the responsible bodies in social institutions (e.g. Hospitals, Jails, Schools, and nursing homes) about the role of social specialists. Also, there was recognition that improvement was needed, as another faculty member considers that SSD should be more open with those employers, through mutual co-operation and collaboration research.

In the light of the same issue, employers of EED graduates stated that those graduates lack the required skills needed for jobs. One of faculty members mentioned This was confirmed through a report offered by one international company about some graduates who applied for a job. The report provides a number of comments about the graduates. For example, they encountered difficulties in communication skills, practical side, and had poor English language. Gernerally this issue is also emphasised by Porter and Yergin (2006) in their report who indicated that the perception of employers in Libya is that the education system is not providing them with the skills the Libyan economy required.

Based on the above discussion regarding employers and Libyan HEIs, it is required and important for Libyan HEIs in general to involve the main employers and other social institutions to influence their provided activities and programmes. That could be achieved by building a partnership with those employers by involving them as an external member in the public committee of the HEI. Also, sharing with them knowledge and information through establishing a network where members from both sides can co-operate and collaborate in different activities. The research suggests that this will give more opportunity for both of them to understand each other in more effective way, subsequently employers become more able to be involved in educational programmes. Also, employers become more capable to evaluate and assess those programmes related to the labour market needs. In addition, Libyan HEIs would

demonstrate care and thinking about the future needs of their students by helping them through facilitating jobs. Likewise, Saunders and Walker (1991) emphasised this issue where it is essential to involve employers as a part of the team in the design and development of educational programmes provided by HEIs. Salama (2001) adds that this will lead to enabling HEIs to respond quicker to the labour market needs facing effectively the rapid changes encountered technology.

Furthermore, section 7.9 illustrated that there is an absence of any independent body or agency for measuring and evaluating Libyan HEIs performance while the literature review, section 2.2.6.2 and section 3.3.8 in analytical framework showed that developed countries adopt such an approach. However, in the presence of such agency, it is potential for such agency to offer assessment and evaluation reports about the performance of HEIs programmes. Hence, these reports could be beneficial to the government and different public sectors including the main employers' organisations by offering them better understanding about the quality standard of HEIs. Yet, as mentioned earlier in this section that employers' organisations, lost confidence in traditional management of academic quality. In their view, it was not certain that Libyan HEIs were able to match their qualitative requirements with the needs of a modern workplace and labour markets in an increasingly globalising economy and rapid change in technology. The relationship between the university and its graduates is another issue raised by the research findings. It was found that there is no communication and contact between university and its graduates except very limited attempts from graduates to discuss with their professors some problems that faced them in their work. Libyan HEIs could build clear relationships with their graduates to strengthen the link between HEIs and, business and industry sectors. This issue is discussed in section 2.2.6.3. Consequently, students will be more involved, in the real life job, as well as more engagement will be given to employers' organisations in educational programmes. However, section 7.3 in this chapter revealed that both embedded case studies failed to involve their students in evaluation of teaching and learning processes.

7.12 A Critique of the Research methodology, Findings and Discussions

In this section, the research methodology (approach, strategy, and data collection methods) adopted by this research will be criticised.

7.12.1 A Critique of the Research methodology

The selection of the appropriate methodology for this research came after a review of the literature of the research topic along with the literature of research methodology. It

provides a suitable and more insightful 'framework' research design for investigating the quality issues encountered within the Libyan HE context through the two embedded case studies. In this research, the use of a qualitative approach was argued to be a good means to explore and get an in-depth understanding of the phenomena investigating the quality issues in such context.

The strategy of this research was to adopt a case-study approach, allowing the researcher to deeply understand the phenomenon under investigation in its real life context. It offered the potential of a more holistic understanding of the nature, context, and processes of quality practices from the point of view of the interviewees. This study used a single case study with embedded multiple units of analysis research design (Yin, 2003). Such single case (Al-Fateh University) is considered to be representative (typical) which is a potential single case where lessons learned from this case are informative and helpful (Yin, 2003). Furthermore, the two embedded cases were selected in order to represent the two major fields provided by most of universities around the world i.e. technical and humanities. This gives opportunity to the research to cover and understand the phenomenon under investigation from different vital perspectives.

This research also adopted multiple data collection methods, in what has been called 'triangulation' so that collected data from one type of source could be checked against data from another. These methods included; an in-depth semi-structured interview and analysis of documentary materials e.g. previous research such as Alfnish *et al* (1998), Alhawati (2005), and Al-Teer (2006). Also, related reports are used e.g. Porter and Yergin (2006) and General Planning Board Report (2002). Additionally, the intensive review of the related literature and the quality issues that affect the administrative and educational processes within the context under investigation enables the researcher to generate and develop the interview protocol. To enhance validity of the interview protocol, the interview protocol was reviewed and discussed with some Libyan PhD students. To further guarantee the validity of the interview questions, a pilot study was carried out twice. The first one was carried out in UK when a number of Libyan PhD students were interviewed and the second one was occurred within the real case study through embedded cases. This was done to check whether the questions are clear and understandable by the interviewees in order to make them comfortable and familiar. It also gave the researcher the opportunity to improve his behaviour, presence, questioning technique and interview ethic so as not to bias or skew responses.

Analysing the collected data was based on the themes provided by the analytical framework. This made it easy to categorise, investigate and understand the quality issues in the real life context. This categorisation offers the researcher a good opportunity to understand different quality issues raised by respondents and enable them to be discussed in the light of the literature review.

7.12.2 A Critique of the important implications for the embedded cases

This section presents the critique of the research findings and discussions through providing the important issues or problems that could affect the quality improvement processes in the case study including both embedded units.

One of the important aspects of the findings of the research showed there is a general awareness and belief about the importance and need for improving the quality of services and activities provided by Libyan HEIs. This awareness and belief among Libyan educators and academics at different levels include Libyan HE leaders, the university top management, and senior leaders and staff members in both embedded cases. Also, the respondents including senior leaders, faculty members and support staff emphasised the importance of the quality aspects provided by TQM philosophy which are discussed by the research. These quality aspects include education and training, open communication, measurement, continuous improvement, and empowerment and involvement. In addition, such awareness and belief is a good base and environment to embrace and embed the notion of quality aspects among Libyan HEIs. Additionally, it would be expected to enhance commitment to continuous quality improvement (CQI) particularly among senior leaders of those institutions. Also, the awareness present could strengthen adopting an approach for change towards quality improvement. Furthermore, it helps to limit fear that is frequently encountered staff during a process of change.

Another important finding was that there is a lack of understanding among senior leaders at the level of university including both embedded cases about the quality concepts, notions, and practices. For example, senior leaders at the level of university and faculties are not able to understand effectively the needs of lower levels, where the speciality of senior leaders works as a barrier to communicate and understand those needs. Also, both embedded cases were unsuccessful to accept and understand the value of students' feedback as a part of CQI process. This indicates that there is a misunderstanding among them about the quality initiative in general. On the other hand,

the research showed a positive dimension in that leaders in general are considering ethical dimension in their behaviour and jobs.

Administration bureaucracy is considered as an important factor that affects most aspects of quality improvement process and services provided by the university including those of the two embedded cases. Additionally, the research revealed that Libyan universities' leadership encountered changeability and unsettledness in general. Also, it is revealed that the university administration is strongly influenced by the Libyan culture either social or/and political, therefore, the decisions taken by such administration are affected. Moreover, the research revealed that Libyan HEIs encountered a deficiency in infrastructure of buildings, facilities for people who have special needs, laboratories, libraries, journals and internet access. Consequently, this influenced the quality services provided by those institutions.

The research demonstrates that staff members and senior leaders at the level of university including staff members and senior leaders in both embedded cases need to be educated and trained in the quality notions, concepts, and initiatives if improvement is to be embraced. However, it will be difficult to make any progress when the staff members lack the necessary knowledge for change.

The research also revealed that reward and recognition system adopted by the university including those within the two embedded cases is unable to make people more commitment to their jobs in the absence of good salaries. In addition, the research showed that there is no evidence that the legislations of Libyan HE reward and recognition system provided or indicated any specific article for rewarding excellent teaching. Additionally, the research finding demonstrate that the lack of effective communication process, appropriate infrastructure, training programmes, efficient reward system, and using of quality tools and techniques are considerable factors behind the lack of commitment to quality in both embedded cases.

There was no evidence from research findings that Libyan HEIs including Al-Fateh University adopt any kind of approach to measure or assess their provided programmes, services, and activities. Also, those institutions do not use internal or external bodies for assessing their provided programmes and services. In addition, both faculties (EF and LF), according to both embedded cases, do not use any approach to assess their activities against other excellent peers (benchmarking). Furthermore, the empirical evidence in this research revealed that there is no long or short-term approach adopted

by both embedded cases for a continuous improvement process. Generally, the attempts of improvement aspects offered by both embedded cases were sub-optimal and not based on measurement processes of their activities, subsequently those attempts are considered ineffective.

Generally, in Libyan HEIs including Al-Fateh University there is a lack of environment in which people are empowered and people are not given sufficient authority, necessary knowledge, information or resources to change and improve the processes. It is found that Libyan HE top management intervene and influence decisions taken by the university leadership. Despite that there is a general agreement among Libyan educators about the importance of involving employers in educational programmes provided by HEIs. The research findings accordingly demonstrate that the relation between Libyan HEIs and employers of their graduates is very limited and could be described as weak. Additionally, there is an absence of communication between Libyan HEIs including Al-Fateh University and their graduates who work in industry and business.

7.13 Discussing the Contribution to Existing Knowledge

Without any doubt, this is the first in-depth study carried out in Libya to investigate issues that enable and affect the quality of services provided by Libyan public universities using principles of TQM philosophy as a framework: Al-Fateh University as a case study. Hence, the greatest contribution to knowledge is the findings of this study expressed through the lens presented within this study as the framework and themes shown in figure 3.1 and discussed in sections 3.3.1-3.3.10. This study therefore, contributes to literature of these distinct areas of knowledge; Total Quality Management; Libyan Higher Education; and also Arab Higher Education. This research does not claim significant contributions to either of those areas of knowledge, but suggests the literary contribution is greatest for the Libyan Higher Education (LHE) area. The discussion offered by sections 7.2-7.11 led to develop table 7.2. The table shows the list of significantly factors from the research findings where the left hand column indicates the factors that add to existing publications literary contributions to Libyan higher education (LHE) including both embedded cases. The right hand column shows the unique (original) contributions to the knowledge.

Table 7.2 Significant Findings

Significant factors from the research findings	Significant descriptors (why the factors are considered important)	Adds to existing publications literary contribution To LHE	Unique (original) findings
A lack of effective documentation is a problem encountered by the university's administration.		*	
The characteristics of students' administration as one of the Libyan universities' leadership style are likely to be unique, as it has not been reported in the literature review either in the western countries or in the Arab countries.			*
Suspension of the Libyan HEIs' regulations regarding expelling of students who are not able to fulfil the academic pass requirements [government intervention affecting leaders role has led to higher numbers of students]		*	*
Speciality of senior leaders (same area of expertise) biases the understanding of lower levels' needs.		*	*
There is a lack of understanding among senior leaders in Libyan HEIs about quality concepts, notions, and practices.		*	
Leaders at the level of both embedded cases are effectively examining the resources available despite limits of such resources.		*	
Senior leaders at different levels include university, faculty, and department are considering the ethical dimension in their behaviour.		*	
Using both English language and Arabic language by EED lecturers in the same lecture and possibly by similar peers in Libyan HEIs.		*	*
Both embedded cases failed to listen to their students effectively.		*	
Senior leaders in both embedded cases demonstrate and practice good listening to staff members.		*	
There is misunderstanding about the concept of teamwork (committee is the dominant term). This leads to misunderstanding the role of teamwork compared with committee.		*	
Department board as well as university board do not receive training programme to improve members' skills e.g. in interpersonal communication, co-operation, and group decision-making. Teamwork skills are more needed at the level of faculty and university boards than at the level of department boards.		*	
The two embedded cases respond differently about working students in teams [EED (-) and SSD (+)].		*	
Communication process in both embedded cases is considered ineffective, e.g. there is a lack of clear shared understanding of objectives stated by both cases and lack of feedback process.		*	
Staff members in both embedded cases are not happy to be re-trained or go back to class to study new skills.		*	*
"Senior and Junior" programme offered by SSD to support and strengthen the communication and co-operation between old and young generations of academic staff in order to exchange information and knowledge.		*	*
Training staff members of Libyan HEIs on quality principles, tools and techniques has not taken place.		*	
There is no evidence in the Libyan universities' legislations or/and regulations about rewarding excellent teaching.		*	
There is no evidence in Libyan HE legislations, that teaching qualification is one of the requirements when recruiting or employing new academic staff in Libyan HEIs.		*	
Disciplinary regulations (related to staff members) are not applied effectively in both levels of department and faculty, mainly because of collegueship and friendship [social culture].		*	
The lack of necessary infrastructure prevents commitment to quality.		*	

Table 7.2 (continued)

Significant factors from the research findings	Significant descriptors (why the factors are considered important)	Adds to existing publications literary contribution To LHE	Unique (original) findings
Commitment to provide good quality work is affected by bureaucracy of administrative procedures.		*	
There is no evidence that Libyan HEIs including AFU use internal or external auditors to assess the quality of services they provide.		*	
There is no particular criterion used in both embedded cases to evaluate the performance of academic staff members.		*	
Attempts of continuous improvement carried out by both embedded cases are considered ineffective, because they are not based on results of any measurement approach.		*	
Relation and co-operation between employers of graduates and Libyan HEIs are limited.		*	
More understanding is required from employers regarding programmes, services, and activities provided by Libyan HEIs in order to be effectively involved in such services and activities.		*	
There is no link and communication between Libyan HEIs and their graduates who work with other institutions.		*	

As shown in table 7.2 a number of unique (original) contributions to knowledge are provided by this research, since those findings have not been reported in literature review. For example the student administration as one of leadership styles adopted by Libyan HEIs and the consequences of such adoption where students are entitled to control both academic and administrative issues. Also, speciality of senior leaders (same area of expertise) biases the understanding of lower levels' needs. This indicates that senior leaders need to be trained how to be able to communicate and understand the needs of their followers despite the differences of their specialities. Using two languages (English and Arabic) in the same lecture by lecturers of EED is also unique finding, since it has not been reported in Western literature review or in Arab literature review who supposes to have same issues.

Further to those contributions, this research has shown that the lens created through using the themes developed as a framework for question sets and interview focus is useful. The usefulness of this approach is proven because of success toward fulfilling the aim and objectives. Hence, the themes and question sets can be considered a contribution to knowledge as well as the methods adopted in this thesis for using them.

It is expected that Libyan educators and Libyan government bodies affecting higher education will benefit the most from the contributions presented by this research.

However, they will need to consider carefully a holistic approach, if they want to improve performance of HEIs in Libya, hence this thesis can help provide knowledge to support their efforts. Similarly, the case study organisation, the two embedded cases and their staff could use the knowledge presented in this thesis to purposely direct change toward improving their quality services. Accordingly, each previous section of this chapter provides guidance and recommendation for improvement efforts based on the literature survey, best practice and advices.

7.14 Limitations of the Research

In this research, all the efforts were made to ensure the collection of high reliable and valid data to achieve the research aim and objectives. Yin (2003) points out that every research is limited by the constraints placed upon the researcher; accordingly this research is no exception. Despite research efforts, it was not possible to control all the influences that were likely to affect the quality of the research. Therefore, the limitations of this research are given below:

- The study is limited to one public university (Al-Fateh University as a single case study and the two selected embedded cases, hence the findings can only be generalised to theory with any certainty (analytical generalisation as Yin, 2003). Consequently, this study is less concerned about generalisation towards other cases as discussed by (Saunders *et al*, 2003).
- There was a lack of literature on the quality aspects within the Libyan HE context. This issue was considered as a limitation of the research.
- Some of the documents were considered private by both embedded cases e.g. meetings minutes, so the researcher was not able to obtain them. This has reduced the ability to confirm or refute response from interviewees; hence many responses can only be claimed as opinions or attitudinal responses.
- The investigation may be overly influenced by the subjective views of the researcher (Miles and Huberman, 1994; Yin, 2003). However, this bias has been considerable reduced because of the structured methodology adopted. Robson (1993) and Easterby-Smith *et al* (2002) pointed out that the potential shortcoming in a research is the possibility of bias, and could be considered as a limitation. This limitation was considered during the data collection or data analysis. In respect of the data collection, the researcher made efforts to avoid being biased as explained in chapter four. Additionally, triangulation was used in order to avoid bias during data analysis.

- During the interviews the researcher may have given out unconscious signals/clues that guide respondents to give answers expected by the researcher (Miles and Huberman, 1994). This was avoided as much as possible by the researcher keeping himself neutral and giving the interviewees freedom to answer the questions (Saunders *et al*, 2003).
- Another limitation concerned the lack of ability to record some interviews (e.g. with students, some of faculty members, support staff, and employers) due to cultural constraints. This could be a cause of missing important information; however the researcher tried to write as much as possible during the interview in order to tackle this limitation. Also, immediately after each interview the researcher spent time to write all pieces of information and ideas while they were still easy to remember.

7.15 Summary of Chapter 7

This chapter has provided a discussion of the findings and their implications. Many issues have been highlighted which affect the quality services and programmes offered by Libyan HEIs in general. For example, the absence of education and training programmes for staff members leads to a lack of understanding quality concepts and initiatives among senior leaders. Also, leadership of Libyan HEIs have encountered great changeability and unsettledness. In addition, there is a lack of an effective and efficient measurement approach where HEIs can assess their own performance in order to create and adopt continuous improvement based on facts. Furthermore, this chapter highlights that the administration bureaucracy is a considerable factor that affects the quality improvement attempts provided by the two embedded cases. The shortage in the infrastructure is another remarkable factor that influences the provision of good quality services. Likewise, ineffective reward and recognition systems adopted by Libyan HEIs including Al-Fateh University plays an important role in frustrating the motivation and incentives needed for staff members. Clearly, there are a number of vital and important issues that have been highlighted during this discussion including the contribution of this research to existing knowledge. Finally, this chapter addressed the limitations of this research. The next chapter concludes the thesis by offering overall conclusions and some recommendations for future research.

CHAPTER 8

Conclusions and Recommendation

8.1 Introductory Conclusions

This research has studied the issues that enable and affect the quality of services in Libyan higher education context. It is aimed at investigating the issues that enable and affect the quality of services provided by Libyan public universities; within Al-Fateh University (AFU) as a case study through two embedded cases. Those embedded case studies are the electric and electronic department (EED) and the social service department (SSD). To maximise the quality of the research findings there was a need to choose the most appropriate methodology, by which the research aim and objectives would be achieved. The research methodology adopted in this study was consequently a phenomenological (social constructionism) philosophy based (section 5.3). As justified in section 5.6, the case study was decided as the best strategy for this research and within the case study research two embedded cases were chosen, having considered the advice of Yin (2003) regarding the appropriateness of this strategy. The required data was collected to achieve the aim and objectives of the research through two main sources:

- (i) Secondary data collection method, an intensive literature review to understand the aspects of TQM philosophy in general and in HE in particular.
- (ii) Primary data collection method, in-depth semi-structured interviews (section 5.7.1) was used to investigate issues that are enabling and affecting the quality of services provided by two embedded case studies.

The analytical framework (figure 3.1) through its themes (key TQM principles), which based on literature review has guided the researcher to select a suitable approach, design, techniques and methods of the research methodology to achieve the research aim and objectives. In-depth semi-structured interviews were conducted to gain an in-depth understanding of issues that are enabling and affecting quality of services within the two embedded case studies. Documents were also used for the same purpose as well. Finally, an analysis and discussion for the data collected was carried out to investigate and interpret the participants' responses and their implications. The research discussions identify, investigate and understand, in-depth, the issues affecting the quality of provided services within the two embedded cases.

8.2 Meeting the Aim and Objectives of the Research

The main aim of this research is to investigate issues enabling and affecting the quality of services within the two embedded case studies. Ultimately, this aim has been achieved successfully through the research objectives being fulfilled. The specific objectives of this research are defined accordingly as:

The first objective of this research was: “To review the literature relevant to this research, both from TQM philosophy in general and from HE publications in particular”. To achieve this objective, a critical literature review was conducted in chapter 2, which was provided by part I and part II. The following aspects have been covered through part I of literature review; definitions and concepts of quality, the development of quality, contributions from quality gurus, TQM tools and techniques, quality awards including the Deming award, MBQNA (Malcolm Baldrige Quality National Award) award, and EFQM (European Foundation for Quality Management) award, besides a review of other quality models. Part II covered mainly the concept and definition of HE, challenges facing HE, and the concept of quality in HE, TQM in HE and its needs, and higher education and society day-to-day interaction through its three main activities include; business interaction, teaching and learning, and research activity. Also, overview of MBNQA and EFQM models in HE has been covered. Accordingly, a number of key TQM principles were identified. Thus, the first objective was successfully achieved.

The second objective was: “To develop analytical framework based on TQM philosophy that enables the creation of a set of in-depth semi-structure interview themes and consequently questions”. To meet this objective a number of key TQM principles have been identified from earlier literature review. Those principles are presented in the analytical framework themes (figure 3.1) in chapter 3. In order to understand deeply those principles, as provided by the TQM philosophy, aspects of those key TQM principles, both in general and in HE, are covered in chapter 3. The interview protocol (tables A.11.1-A11.10 in appendix 2) was based on the contents and the order of the themes within the analytical framework. Meeting this objective was highly dependent on the first objective having been accomplished, since the underpinning knowledge derived from this helped the researcher to understand the theories and concepts of key TQM principles and, consequently prepare the interview protocol.

The third objective was: “To investigate the historical and current background of the Libyan HE context in order to understand the difficulties or/and issues facing Libyan HEIs that might affect the quality of their provided services”. To satisfy this objective, intensive studying of different related materials including what has been written by Libyan educators was carried out in chapter 4. There are many related issues covered in chapter 4 that includes;

- (i) the local university education development needs,
- (ii) university leadership,
- (iii) characteristics of Libyan HEIs curricula,
- (iv) students’ assessment methods,
- (v) teaching and research,
- (vi) Libyan HEIs and labour market.

Also in chapter 4, the key problems encountered by Libyan HE were highlighted. That offered deep understanding of the difficulties and issues that might influence the quality of services provided by Libyan HEIs from Libyan educators’ point of view. Therefore, the third objective has been successfully achieved.

The fourth objective was: “To identify and critique issues enabling and affecting the quality of services related to the investigated TQM themes within the Libyan HE context”. In order to achieve the first part of this objective i.e. “to identify the issues”, the data collected from the two embedded cases were categorised and developed according to the analytical framework. Thereafter, the data were analysed using a narrative technique to interpret and present it in a meaningful form (Chapter 6). Hence, identifying issues enabling and affecting the quality of services within the two embedded cases has been effectively accomplished. To attain the second part of this objective i.e. “to critique the issues”, the findings derived from the previous part of this objective were discussed successfully using a comparison approach with the literature in order to gain a wider and more in-depth understanding of the issues that are enabling and affecting the quality of services within the two embedded cases. This process allowed the researcher to identify those issues that were consistent with the literature, and some unique issues emerging from the empirical work. Additionally, by using the various documents as well as in-depth semi-structured interviews, data triangulation was often achieved. Hence, the issues enabling and affecting the quality of services provided by two embedded cases are identified and critiqued. Therefore, the fourth objective of this research was successfully achieved.

Finally, by achieving and meeting the four research objectives, “investigating issues enabling and affecting the quality of services provided by Libyan public universities

using TQM philosophy as a framework: Al-Fateh University as a case study through two embedded cases” as the main research aim was successfully achieved.

8.3 Originality and Major Contributions to Knowledge

There is a lack of previous studies related to the issues that could enable and affect the quality of services provided by HEIs in a Libyan context. Therefore, this research has made significant original contributions to knowledge by investigating issues that are enabling and affecting the quality of services provided by the two embedded cases within the Libyan HE context. Accordingly these issues have not been investigated before; hence this presents an opportunity to contribute to existing knowledge within the field of quality in HE and also in the field of management of HEIs with particular focus on Libya. Thus, this research has reduced the gap in knowledge in Libyan HE context in specific and in Arabic HE context in general as shown in figure 8.1 (considering the similarity of culture and environment context).

Specifically this research revealed through its study that original findings where that:

- a) The characteristics of students’ administration as one of the Libyan universities’ leadership style are likely to be unique, as it has not been reported in the literature review either in the western countries or in the Arab countries.
- b) Suspension of the Libyan HEIs’ regulations regarding expelling of students who are not able to fulfil the academic pass requirements [government intervention affecting leaders role has led to higher numbers of students]
- c) Speciality of senior leaders (same area of expertise) biases the understanding of lower levels’ needs.
- d) Using both English language and Arabic language by EED lecturers in the same lecture and possibly by similar peers in Libyan HEIs.
- e) Staff members in both embedded cases are not happy to be re-trained or go back to class to study new skills.
- f) “Senior and Junior” programme offered by SSD to support and strengthen the communication and co-operation between old and young generations of academic staff in order to exchange information and knowledge.

Consequently other researchers in the field of quality in Libyan HEIs would benefit from this new contribution to knowledge.

The figure 8.1 shows that this research has shown and accepts there is a knowledge gap that exists between Libyan Higher Education literature and literature available for Total Quality Management. As this study aims to investigate issues enabling and affecting

the quality of services provided by Libyan public universities using principles of TQM philosophy as a framework: Al-Fateh University as a case study, thus there is an opportunity to close this knowledge gap. The discussion in this section focuses on closing the knowledge presented in figure 8.1 and also aims to discuss the findings shown in chapter 6 thus adding knowledge to the current literature available in the field of Total Quality Management and also in the Libyan Higher Education sector.

The knowledge gap has, to a certain extent, been reduced but not entirely eliminated through this research and there have been many instances where the literature survey has aided comparisons to practice at Al-Fateh University. Hence, figure 8.2 shows an overlap of the two areas of written knowledge and phenomena under investigation and as a consequence of this research shows that knowledge now overlaps.

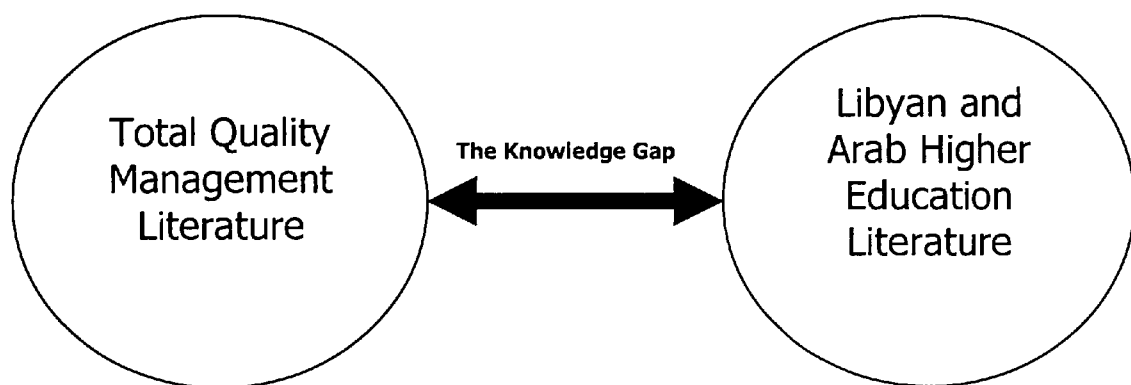


Figure 8.1 demonstrating the knowledge gap between TQM literature and Libyan literature

This research consequently, has not only closed the gap in knowledge, through its structured review of literature and thorough research methods adopted to gather data but, it has also provided significant insight into the management of Al-Fateh University, investigated through the lens of Total Quality Management and identified then assessed the attitudes of respondents from each embedded case study departments.

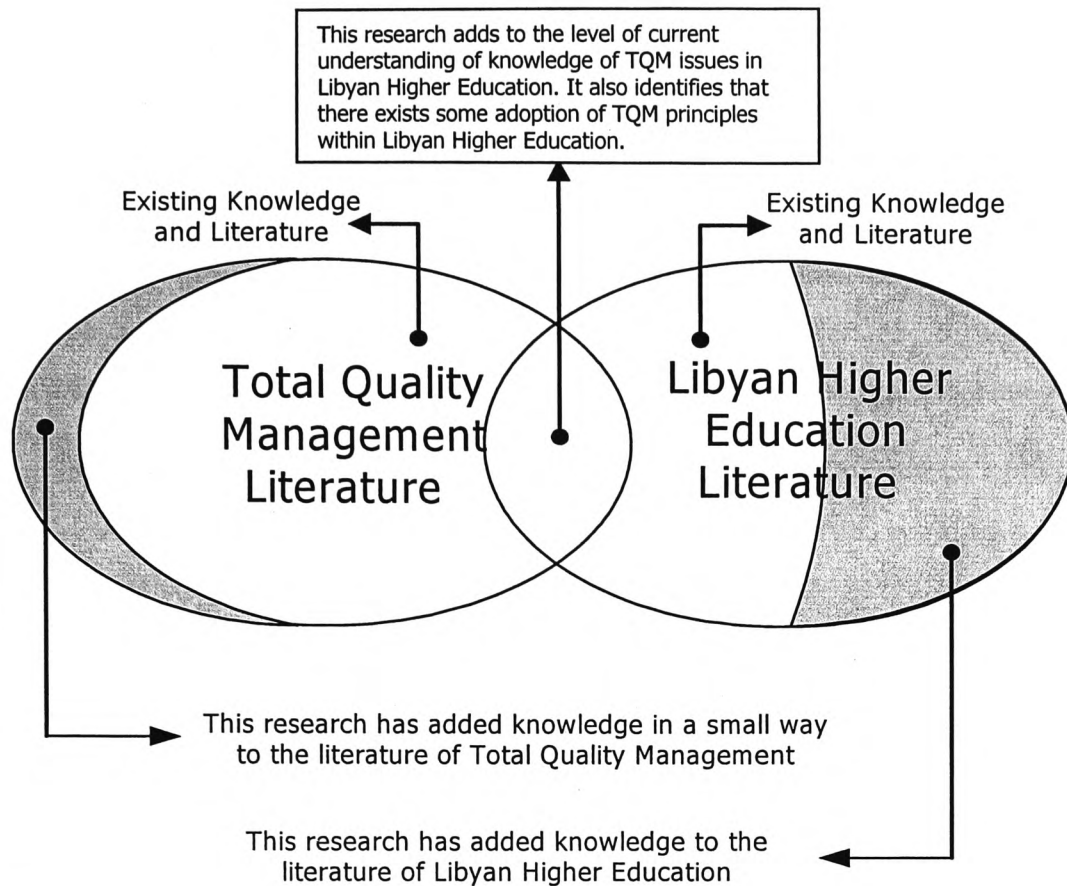


Figure 8.2 demonstrating the contribution to knowledge and bridging the gap between TQM literature and Libyan HE literature

Additionally, this research has presented the first contribution towards investigation of a useful conceptual understanding of quality issues in the Libyan HE context from a totality point of view using the aspects of TQM philosophy as lens for this purpose. Also, this research provides a number of suggestions (implications) for university leadership (see appendix 5).

8.4 Limitations and Possible Improvements to the Research Process

Based on section 7.14 in chapter 7, this section presents an overview conclusion regarding the limitations and possible improvement to the research process. This research is limited to a single case study as selected research strategy (section 5.6.1.1). However, from this aspect further research could use multiple case studies for possible improvement to the research process and its generalisability of findings. In this case comparison among many HEIs might be useful, where knowledge could be attained from different experiences. Also, a large sized of population could be covered using a quantitative approach as opposed to the approach used in this research which was

mainly qualitative. In this respect e.g. questionnaire is useful as a data collection method. Additionally, greater research validity could be achieved by using both qualitative (used by this research) and quantitative approaches in a multi-methodological approach. Also, there is a possible improvement to the research process (at the level of qualitative approach) if targeted interviewee groups are extended. For example, those groups could include members from general public committee (responsible body of Libyan HE), heads of Libyan HEIs, Libyan educators who are interested in quality issues, and public and private sectors include business and industry.

Furthermore, there is a possibility to improve the research process from a data collection point of view. As mentioned in the above paragraph, a questionnaire could be used as another data collection method besides just adopting interviews. In this research in-depth semi-structured interview is used as the main method of data collection (sections 5.7.1 and 5.7.2) in addition to documents. On the other hand, quality in higher education is a debatable issue; accordingly data collection could be improved by using a focus group method. This method is a method of interviewing that involves more than one, usually at least four, interviewees (Bryman, 2004). Researchers using this method are interested in such things as how people respond to each other's views and build up a view out of the interaction that takes place within the group. Additionally, other options of methods and techniques are available in research methodology context that could be used to improve the research process. For example, those methods are observation, comparative studies, and benchmarking.

This research has successfully presented its findings by categorising them into the research framework themes thus providing discussion and insight into each of those themes. Taking that further, each theme provided by the analytical framework could be investigated individually in order to obtain deep understanding of issues encountered within each theme. While this research has not attempted to consider the interconnectedness and interrelationships of factors, issues or even findings further research may want to. Accordingly, interrelation, interconnection, and categorisation among those themes could be investigated in order to find causal relationships, priorities processes and issues to be improved.

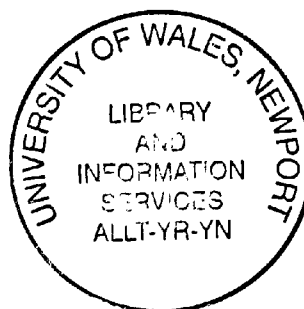
8.5 Directions for Further Research

It could be said that, as the number of Libyan Higher Education Institutions (HEIs) striving to achieve good levels of quality services continues to grow, further research is

needed to expand the findings from this research and to provide even more knowledge of quality issues in HEIs. Therefore, this research identifies sufficient opportunity for future research on issues generated by the research itself, such as:

1. A replication of this research in other contexts should prove helpful in confirming the validity of its findings. This research offers a snapshot of people's perception at a particular moment in time. So, replication of the research in the Libyan context over a longer period would build significantly on the findings.
2. Further empirical studies using large sample sizes and greater geographical diversity may be helpful in further validating the findings of this study.
3. It is useful to conduct such studies for Further Education (FE) in Libya because this sector could be considered as a key influencer of quality and provider of students to higher education.
4. This research could present a fundamental background for researchers interested in investigating the level of readiness in Libyan HEIs towards implementing a TQM approach.
5. Other researchers studying TQM in different sectors could adopt or modify the analytical framework presented in chapter 3 to their area of study. Consequently, the same or very similar research methodology used by this research could guide their study.

Hence, this research is seen as a foundation for further research, primarily because it has been the first study of quality issues in Libyan HEIs.



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APPENDIX 1

Table A.1 Deming's Fourteen Points (source: adopted from Walton, 1985, pp 34-36)

- 1. Create constancy of purpose for improvement of product and service.**
 - Innovation
 - Research and education
 - Continuous improvement of products and services
 - Maintenance of equipment
- 2. Adopt the new philosophy**
 - Transformation of management
- 3. Cease dependence on mass inspection**
 - Inspection process is too late in the process and is costly and ineffective
 - The old way: Inspect bad quality out. The new way: Build good quality in
 - Quality comes not from inspection, but from improvement of the process
- 4. End the practice of awarding business on price tag alone**
 - Leads to proliferation of suppliers
 - Buyers jump from one supplier to another
 - Price has no meaning without a measure of the quality being purchased
- 5. Improve constantly and forever the system of production and service**
 - Improve is not a one-time effort
 - Teamwork is essential to the process
 - Management must lead the way
- 6. Institute training**
 - Provide training by knowledgeable individuals. It is difficult to erase improper training
 - Provide training until output reaches a stable state
- 7. Institute leadership**
 - Leadership is the job of management
- 8. Drive out fear**
 - Not afraid to express ideas. Not afraid to ask questions
 - Fear will disappear as management improves
- 9. Break down barriers between staff areas**
 - Conflicting goals between departments can ruin the overall organisational goal
 - Teamwork is required
- 10. Eliminate slogans, exhortations, and targets for the workplace**
 - Slogans implicitly suppose that employees could do better if they tried harder
- 11. Eliminate numerical quotas**
 - Quotas impede quality perhaps more than other single working condition
- 12. Remove barriers to pride of workmanship**
 - Increase employee involvement
 - Increase communication
- 13. Institute a vigorous program of education and training**
 - Management must stress that no jobs will be lost due to productivity improvement
 - Need to provide new knowledge and skills to deal with new materials and new systems
 - Education and training are investment in people
 - Required for long-term planning
- 14. Take action to accomplish the transformation**
 - Management must organise itself as a team
 - Follow the cycle – Plan, Do, Check, and Act

Table A.2 Juran's Ten Steps (source: adopted from Lam *et al*, 1991, p 28)

1. Build awareness of the need and opportunity for important
2. Set goals for important
3. Organise to reach goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators)
4. Provide training
5. Carry out projects to solve problems
6. Report progress
7. Give recognition
8. Communicate results
9. Keep score
10. Maintain momentum by making annual improvement part of regular systems and processes of the

Table A.3 Crosby's fourteen points (source: adopted from Crosby, 1979, pp 132-139)

1. Management commitment
2. Quality improvement teams
3. Quality measurement
4. Cost of quality evaluation
5. Quality awareness
6. Corrective action
7. Establish an ad hoc committee for zero defects programmes
8. Supervisor training
9. Zero defects day
10. Goal setting
11. Error cause removal
12. Recognition
13. Quality councils
14. Do it over again

Table A.4 Feigenbaum's Ten Benchmarks (source: adopted from Feigenbaum, 1991, pp 828-

1. Quality is a company-wide process
2. Quality is what the customer says it is
3. Quality and cost are a sum, not a different
4. Quality requires both individual and team zealots
5. Quality is a way of managing
6. Quality and innovation are mutually dependent
7. Quality is an ethic
8. Quality requires continuous improvement
9. Quality is the most cost-effective, least capital-intensive route to productivity
10. Quality is implemented with a total system connected with customers and suppliers

Table A.5 illustrates several tools and techniques of TQM and their benefits.

Tools and Techniques	Benefits
Control chart	It allows organisations to control their processes and tackle the variation exists. It is based on taking a number of samples produced by the process at random intervals and then the data is plotted on a graph against time or a number of samples (Oakland and Morris, 1997).
Quality function deployment (QFD)	QFD is able to integrate the customer requirements with products and service design specifications. The benefits are that design is focused on customer requirements, it prioritises design activities and it reduces the design cycle. QFD is also able to identify and rank effectively the relative importance of customer requirements (Lam and Zhao, 1998).
Histogram	It is used for drawing grouped data by putting them into categories, or bands, in order to make the information easier to handle. Histogram can interpret the data taken from check sheet and characterise the frequency of such data in a form of bars (Bergman and Klefsjo, 1994)
Flow chart	It is used to make sure that the inputs and flow of the processes making up the businesses are implicit. It shows the natural sequence in the process, so the team can identify potential problem areas, create new process and improve it (Oakland and Morris, 1997).
Cause and effect (fishbone chart or Ishikawa diagram)	It is a technique for generating a large number of ideas quickly and also provides an illustration of relationships between different activities (Oakland and Morris, 1997).
Pareto diagram	It is a graph that ranks data classifications in descending order from left to right to identify the most important problems. It tells what percentage defect and failure can be attributed to some particular cause (it will probably be found that about 80% of the errors, defects will stem from about 20% of the causes) (Besterfield <i>et al</i> , 2003).
Scatter diagram	It shows the pattern of relationship between two variables that are to be related. It is helpful to compare one set of data with another to find a relationship between factors or parameters (Oakland and Morris, 1997).
Benchmarking	Is a technique that provides organisations an opportunity to learn from the others and to measure themselves against the excellent ones. It considers the experience of others and uses it (Besterfield <i>et al</i> , 2003).
Force field analysis	It is used to identify the forces that either help or resist necessary changes and to plan how to overcome them (Sims and Sims, 1995).
Data-collection form	To gather data systematically to obtain a clear picture of the facts (BS 7850, 1992).
Affinity diagram	To organise into grouping a large number of idea, opinions or concerns about a particular topic (BS 7850, 1992).
Brainstorming	It is a technique for tapping the creative thinking of a team to generate and clarify a list of idea, problems or issues in a short period of time (BS 7850, 1992).

Table A.6 things to do and problems to look for when adopting TQM (source: adopted from Michael *et al*, 1997, pp 104-120)

Things to do	Problems to look for
<ul style="list-style-type: none"> ➤ Survey customers regularly. Customers are the focal point of any service. ➤ Look at the customer carefully. Define all customer groups thoroughly but prioritise their needs and focus on the main “customer” to be served. ➤ Allocate sufficient time and resources. ➤ Teach by example and direct involvement. Top leadership is the key to any TQM programme and the driving force behind success and failure. In most cases, the president of the institution must be the initiator and the programme leader in all aspects. ➤ Sell the TQM programme. Do not force the programme on the employees. Leadership must take the programme attractive and necessary to employees; they have to accept it and be willing to follow it wholeheartedly or the programme will fail. Empower the employees and make participation a voluntary thing. ➤ Simplify everything: eliminate rules and regulations that may stifle/flatten the hierarchy and reduce costs wherever possible. ➤ Start with administration. Most of the major leaders in organisations (include higher education ones) began TQM movement with a unit of their administrative area ➤ Do things right the first time. Plan carefully and fully but do not study TQM to death. ➤ Use examples; benchmarking and research on TQM philosophies and programmes can only enhance the chances for success. ➤ Tailor the TQM programme to suit the individual institution. No model is perfect for every organisation (e.g. university). ➤ Use the power of communication. Newsletters and reports are a good way to disseminate information to the community to keep them informed and to get them involved in the institution’s successes. ➤ Provide lots of training for management and staff. Ensure that they have the necessary skills in teamworking and thoroughly understand the tents of a TQM programme. 	<ul style="list-style-type: none"> ➤ Impatience and disappointment: it takes at least five years to implement a TQM programme but most people want a “quick fix”. ➤ Top leaders who do not “walk the walk and talk the talk “. ➤ Unwillingness of top leaders to relinquish authority in order to empower employees. ➤ Failure to adapt business principles correctly to other sectors; e.g. higher education, where faculty can be unaccepting and sceptical of redefining the way higher education operates. ➤ Organisation structure can make it hard to focus on a shared mission or common goals. This can include environments where it is e.g. administration verses academics, where there is intense divisionalisation, and where there is fragmented leadership. ➤ Cultural differences: for example; some colleges and universities feel they are unique and exempt from assessment and evaluation of other social institutions (because they seek knowledge unendingly, they practice quality inherently). ➤ Inadequate resources: as assessment for the resources necessary needs to be conducted in order to allow for enough capital and time to be available for the TQM plan. ➤ Lack of sufficient training and knowledge. ➤ No change in management behaviour.

Table A.7 enablers and results in EFQM model; synthesised from (Hakes, 1994)

Enablers	Results
1. Leadership (10%), How managers and all employees in team leadership roles inspire and drive continuous improvement.	6. People Satisfaction (9%) The perception and feelings of its people of the organization. What are the successes in satisfying their needs and expectations?
2. Policy and Strategy (8%) How senior management incorporate the values and concepts of quality in the determination, communication, review and improvement of the policy and strategy of the organization.	7. Customer Satisfaction (20%) The perception of customers of the organization and its services. What is the success in satisfying needs and expectations?
3. People Management (9%) How the full potential of people is released	8. Impact on Society (6%) The perception of the organization in the community, including the approach to quality of life, the environment and the preservation of global resources
4. Resources (9%) How the organization improves its management, utilization and preservation of its resources including; financial information, materials and technological resources	9. Results (15%) The organization's achievements in relation to its planned performance and the results of all key internal processes
5. Processes (14 %) How the organization identifies, reviews and if necessary revises all key and support processes to ensure continuous improvement.

Table A.8 MBQNA categories (synthesised from Kartha, 2004)

Leadership <ul style="list-style-type: none"> • Organizational leadership • Public responsibility and citizenship 	<p>The leadership category examines senior executives' personal leadership and involvement in creating and sustaining a customer focus and clear and visible quality values. The way in which these quality values are integrated into the company's management system and the way in which the company addresses its public responsibilities are also examined.</p>
Strategic planning <ul style="list-style-type: none"> • Strategy development • Strategy deployment 	<p>This category examines the manner in which the company sets strategic directions to define and strengthen its competitive position. How do the company's key actions plans link to their performance?</p>
Customer and market focus <ul style="list-style-type: none"> • Customer and market knowledge • Customer relationships and satisfaction 	<p>The manner in which the company determines requirements and expectations of customers and markets are addressed in this category. Also of importance is the process through which customer satisfaction is enhanced and assessed</p>
Information and analysis <ul style="list-style-type: none"> • Measurement and analysis of organizational performance • Information management 	<p>This category deals with how the company manages its information. These procedures aid in sustaining company performance. The company's selection, use, and management of information and data affect its process management. Thus, both financial and nonfinancial data management techniques are examined.</p>
Human resource focus <ul style="list-style-type: none"> • Work systems • Employee education, training, and development • Employee well-being and satisfaction 	<p>This category examines how the company develops and realizes the full potential of its workforce in pursuing the company's quality and performance objectives. Does the company maintains an environment for excellence that encourages full participation and personal and organizational growth?</p>
Process management <ul style="list-style-type: none"> • Product and service processes • Business processes • Support processes 	<p>Key aspects of process management, which include customer focused design, product and service delivery processes, support processes, and vendor and partnering processes involving all work units are examined in this category. Does the company incorporate changing customer requirements and technology into its product and service designs? Are production and delivery processes designed to meet the operational performance requirements</p>
Business results <ul style="list-style-type: none"> • Customer focused results • Financial and market results • Human resource results • Organizational effectiveness results 	<p>This category examines the company's performance and improvement in such key business areas as customer satisfaction, financial and market-place performance, human resources, vendor and partner performance, and operational performance. Performance levels relative to competitors are also considered. Current levels and trends in key measures of customer satisfaction and dissatisfaction are considered.</p> <p>Financial and marketplace performance include such measures as aggregate return on investment, market share, business growth, and new markets entered. Human resource results include employee well being, satisfaction, development, and work system performance.</p>

Table A.9 categories and their description of MBNQA-education criteria synthesised from MBNQA(2004)

Category	Description
Leadership <ul style="list-style-type: none"> ▪ Organisational leadership ▪ Social responsibility 	<p>examines how HEI's senior leaders address organizational values, directions, and performance expectations, as well as a focus on students and stakeholders, student learning, faculty and staff empowerment, innovation, and organizational learning. Also, examined the organisation's governance and how the organisation addresses its public and community responsibility.</p>
Strategic Planning <ul style="list-style-type: none"> ▪ Strategic development ▪ Strategic deployment 	<p>Examines how organisation develops strategic objectives and action plans. Also examined how the chosen strategic objectives and action plans are deployed and how progress is measured.</p>
Student, Stakeholders and Market Focus <ul style="list-style-type: none"> ▪ Student, stakeholder, and market knowledge ▪ Student, stakeholder relationship and satisfaction 	<p>This element examines how organisation determines requirements, expectations, and preferences of students, stakeholders, and markets. Also, examined how the organisation builds relationships with students and stakeholders, and determines the key factors that attract students and partners and lead to student and stakeholder satisfaction, loyalty, and persistence and to increased educational services and programs.</p>
Measurement, Analysis, and Knowledge Management <ul style="list-style-type: none"> ▪ Measurement and Analysis of organisational performance ▪ Information and knowledge management 	<p>Examines how organisation selects, gathers, analyses, manages, and improves its data, information, and knowledge assets.</p>
Faculty and Staff <ul style="list-style-type: none"> ▪ Work system ▪ Faculty and staff learning and motivation ▪ Faculty and staff well-being and satisfaction 	<p>This element examines how organisation's work systems and faculty and staff learning and motivation enable faculty and staff to develop and utilise their full potential in alignment with the organisation's overall objectives and action plans. Also, examined the organisation's efforts to build and maintain a work environment and faculty and staff support climate conducive to performance excellence and to potential and organisational growth.</p>
Process management <ul style="list-style-type: none"> ▪ Learning-centered processes ▪ Support processes 	<p>Examines the key aspects of organisation's process management, including key learning-centered processes for the educational programs, offerings, and services that create student, stakeholders, and organisational value, it includes also key support process. This element encompasses all key processes and all work units.</p>
Organisational Performance Results <ul style="list-style-type: none"> ▪ Student learning results ▪ Student and stakeholders-focused results ▪ Budgetary, financial, and market results ▪ Faculty and staff results ▪ Organisational effective results ▪ Governance and social responsibility results 	<p>Examines organisation's performance and improvements in key areas i.e. student learning, and stakeholder focus results; budgetary, financial, and market performance; faculty and staff results; operational performance; and governance and social responsibility. Also, examined are performance levels relative to those of competitors and comparable organisations.</p>

Table A.10 Traditional versus TQM performance measurement systems (source: adopted from Schalkwyk (1998:129)).

Traditional measurement systems	TQM measurement systems
Financially driven (past focus)	Customer driven (future focus)
Limited flexibility: one system serves both internal and external needs	Dedicated to responsiveness and flexibility
Not linked to operative strategy	Linked to TQM strategy
Focus on shareholders	Focus on total customer satisfaction
Goal is to decrease costs	Goals to improve performance
Vertical, top-down reporting	Horizontal, empowering reporting
Cost, output, quality viewed in isolation (quality often completely ignored)	Quality, delivery, time and cost evaluated simultaneously
Focus on individual performance and incentives: individual learning.	Focus on group incentives and organisational learning.

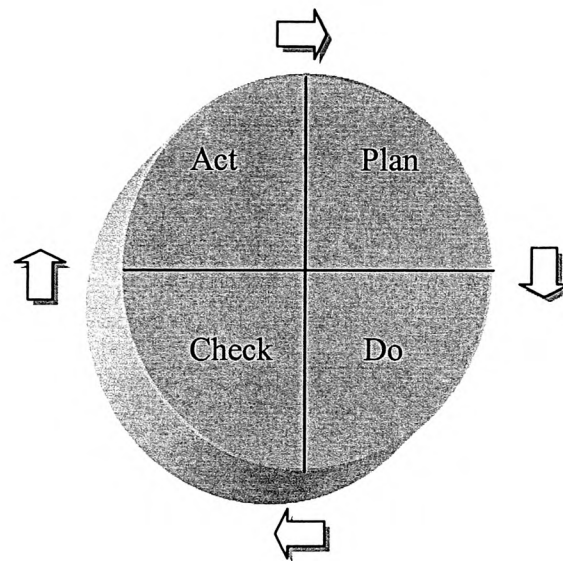


Figure A.1 shows the PDCA cycle of continual improvement (source: adopted from Hoy *et al* (2000:51)).

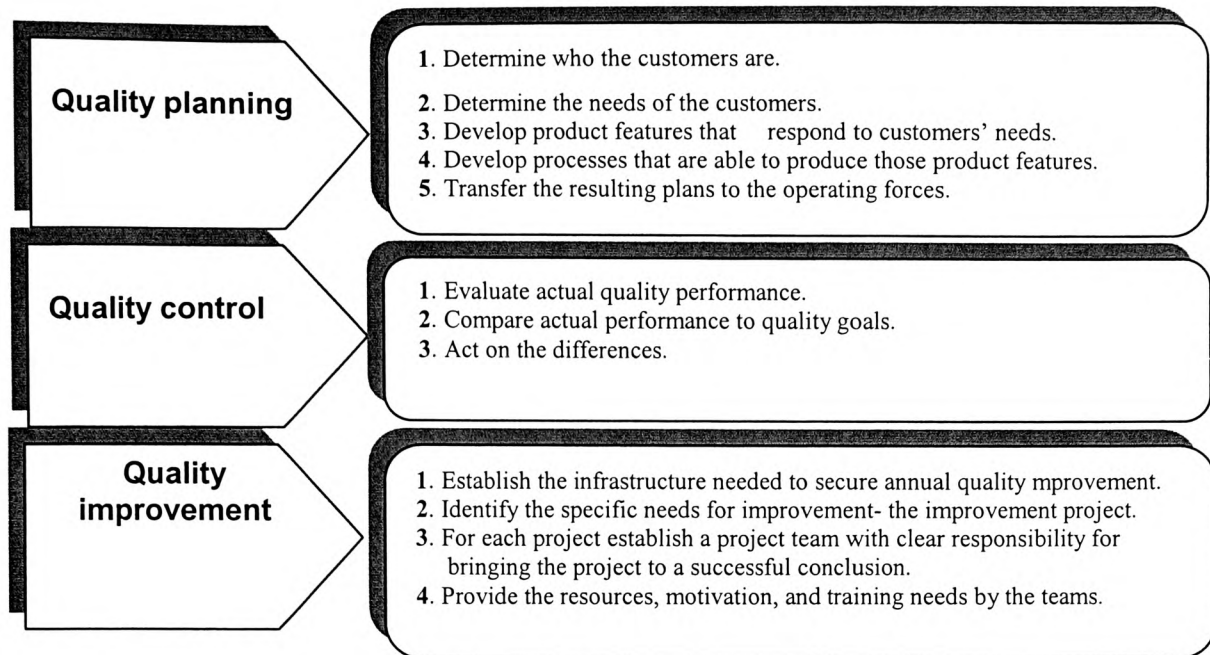


Figure A.2 Three processes of Juran Trilogy and its associated steps (synthesised from Juran, 1989)

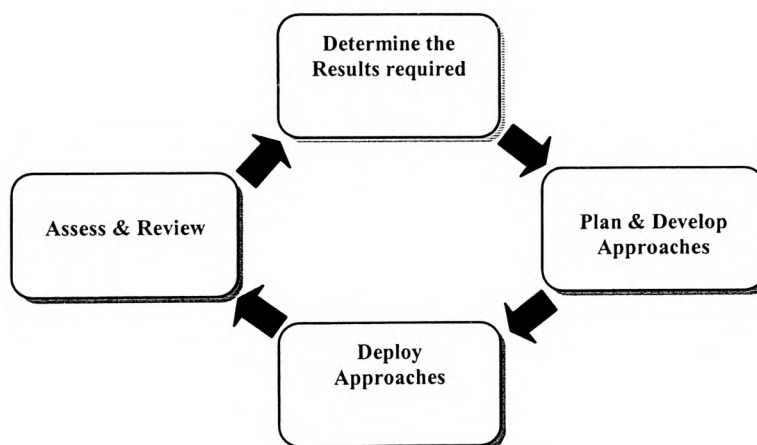


Figure A.3 RADAR logic (synthesised from Hides *et al*, 2004)

APPENDIX 2

Table A.11.1 Leadership Theme

TQM Principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
LEADERSHIP	Kaplan and Norton (1996), Deming (2002), Juran (1989), Chelsom <i>et al</i> (1998), Kartha (2004), Johnson and Golomski (1999), Bell (1995), Sallis (2002), EFQM (2003), MBNQA (2004), Anderson <i>et al</i> (1994), James (1996), Middlehurst (1997), Kruger (2001), Unal (1997), Zhang, (1997), (Kanji, 2001), Gonzalez and Guillen (2002), Fletcher (1999), Burkhalter (1996), Kanji and Tami (1999), Ferrara, (1999), Spanbauer (1995), Baker <i>et al</i> (1990), Gilley (1991), Jelinek <i>et al</i> (1995).	<p><i>This Theme Examines and Addresses to What Extent:</i></p> <ul style="list-style-type: none"> • Leaders in both embedded cases (i.e. EED&SSD) are able to learn from problems to prevent the cause in future. • Leaders in both embedded cases are able to carry their responsibility towards removing barriers and obstacles that make difficult for students and staff members to do their job more efficient and effective. • Leadership style in both embedded cases emphasises the notion of train and coach rather than superior. • Senior administrators in both embedded cases are playing crucial role in creating vision, goals, values and systems that guide the pursuit of continuous improvement. • Leadership in both embedded cases is able to examine the effective and efficient use of available resources. • Leaders in both embedded cases consider ethical dimension in their behaviour e.g. trustworthiness, fairness and honesty in their jobs. • Leaders in both embedded cases are listening to the others (e.g. staff members, students) and communicate the logic behind decisions and instructions, while leaders are commonly criticised for not listening and for not communicating effectively such issues.

Table A.11.2 Customer Focus Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
<p style="text-align: center;">CUSTOMER FOCUS</p>	<p>Kaplan and Norton (1996), Bergman and Klefsjo (1994), Martin (1993), Ho and Fung (1994), Deming (2002), Juran (1989), Feigenbaum (1991), Michael <i>et al</i> (1997), Chelsom <i>et al</i> (1998), Kartha (2004), Johnson and Golomski (1999), Coate (1993), Ramsden (1991), HEFCE (2004b), Bonvillian and Dennis (1995),), EFQM (2003), MBNQA (2004), Zhang (1997), BS 7850 (1994), Walton (1985), (Kruger, 2001), Thiagarajan and Zairi (1997), Newby (1999), Saunders and Walker (1991), Spanbauer (1995), Randall (2001), Venkatraman (2007).</p>	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases believe in their students' views as an essential way and crucial factor for effective monitoring in enhancing the quality improvement of activities provided by them in general and, teaching and learning processes in particular. Both embedded cases take into account the needs of labour market (i.e. employers) and society as a whole in their provided activities e.g. curricula, research, courses delivery, and consultancy. Both embedded cases provide vital support to academic activities e.g. by offering good quality libraries, laboratories, and different facilities related to such activities, also to what extent the effectiveness of these facilities matching the expectation of their academic staff, researchers, and students.

Table A.11.3 Teamwork Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
TEAMWORK	<p>Martin (1993), Dale and Bunney (1999), Ho and Fung (1994), Deming (2002), Juran (1989), Crosby (1979), Feigenbaum (1991), Michael <i>et al</i> (1997),), EFQM (2003), MBNQA (2004), Shapiro (1995), Besterfield <i>et al</i> (2003), Oakland and Morris (1997), Hradesky (1995), Oakland (1993), Curry and Kadasah (2002), Freed and Klugman (1997), Jabnoun (2001), Booth (1994), BS 7850 (1994), Kanji (2001), Spanbauer (1995), Mehra <i>et al</i> (2001), DuBrin (1995), Anderson <i>et al</i> (1994), Oakland (1997), Lewis and Smith (1994), Hackman and Wageman (1995), Cornesky and McCool (1992), Seymour (1992), Chadwick (1995), Sallis (2002).</p>	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> • Teamwork in both embedded cases is able to solve problems includes cross-functional ones. • Teamwork in both embedded cases embraces and embeds the notion of open communication and learning environment. • Teamwork in both embedded cases is effectively contributed in decision-making. • Teamwork in both embedded cases removing organisational and personal barriers that might interfere with effectiveness of continuous improvement processes provided by the embedded case studies. • Teamwork members in both embedded cases are possessed skills e.g. interpersonal communication, co-operation, cross-training and group decision-making. • Both embedded cases studies encourage their students to work in teams to enhance and support the quality improvement of learning processes.

Table A.11.4 Open Communication Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
OPEN COMMUNICATION	<p>Martin (1993), Freeman (1993), Deming (2002), Juran (1989), Michael <i>et al</i> (1997), Doherty (1993), EFQM (2003), MBNQA (2004), Oakland (2000), Freed and Klugman (1997), Feigenbaum, (1991), Besterfield <i>et al</i> (2003), King (1991), Goetsch and Davis (2003), Jabnoun (2001), Wells (1997), Thiagarajan and Zairi (1997), James (1996), Lewis and Smith (1994), Srikanthan and Dalrymple (2004), Seymour (1992).</p>	<p><i>This Theme Examines and Addresses How the Two Embedded Cases:</i></p> <ul style="list-style-type: none"> • Assess the effectiveness of their communication process. • Offer atmosphere of trust and clear shared understanding of objectives stated by each of them. • Allow people to criticise processes and activities provided by them and appropriate response to that. • Respond to feedback from all levels.

Table A.11.5 Education and Training Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
EDUCATION AND TRAINING	Kaplan and Norton (1996), Martin (1993), Dale and Bunney (1999), Ho and Fung (1994), Feigenbaum (1991), Deming (2002), Juran (1989), Crosby (1979), Michael <i>et al</i> (1997), MBNQA (2004), Seymour (1992), Zhang (1997), Ishikawa (1985), BS 7850 (1994), Lewis and Smith (1994), Oakland (2000), Venkatraman (2007), Osseo-Asare and Longbottom (2002), Spanbauer (1995).	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases are focus on training programmes of their staff at different levels and to what extent these programmes are directly related to the professional development needs of every individual, also to what extent are aligned with the institution's objectives. Both embedded cases are aware that their staff is in need for training where they can improve their skills and abilities which allow them to understand, implement, and achieve the desired improvement. Both embedded cases are encouraging their staff to use quality tools and techniques towards realising continuous improvement in their work.

Table A.11.6 Reward and Recognition Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
<p align="center">REWARD AND RECOGNITION SYSTEM</p>	<p>Ho and Fung (1994), Juran (1989), Crosby (1979), EFQM (2003), MBNQA (2004), Besterfield <i>et al</i> (2003), Juran and Gryna (1993), Freed and Klugman (1998), Crosby (1979), Armstrong (1999), Shaw (1999), Brown <i>et al</i> (1994), Mehra <i>et al</i> (2001), Badri and Abdulla (2004), Dearing (1997), HEFCE (2002d), British government white paper on the future of higher education (2003), Cherrington (1995).</p>	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> • Reward and recognition system adopted by both embedded cases is constantly appreciated and acknowledge those who participates the new values and achievements towards continuous improvement in different processes. • Reward and recognition system offered by both embedded cases is sufficient to recruit, retain, and motivate their staff members to achieve better quality. • Reward and recognition system adopted by both embedded cases is treating all staff members equally, fairly, and consistently in relation to the work they do and their contribution. • Both embedded cases link performance improvement at all levels (e.g. individual, teams, section, etc.) with rewards and recognitions based on assessment against a number of criteria (qualitative measures). • Reward and recognition system adopted by both embedded cases take into consideration that earning money is one of the strongest reasons behind the motivation of people to work hard.

Table A.11.7 Commitment to Quality Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
COMMITMENT TO QUALITY	Bergman and Klefsjo (1994), Dale and Bunney (1999), Ho and Fung (1994), Crosby (1979), Doherty (1993), EFQM (2003), MBNQA (2004), Feigenbaum (1991), BS 7850 (1991), Motwani (2001), Curry and Kadasah (2002), Hansson and Klefsjo (2003), Scarnati (2002), Kanji (2001), Gordon (2002), Ishikawa (1985), Ang (2002), Martin (1993), Freed and Klugman (1997), Spanbauer (1995), Kanji and Tambi (1999), Lewis and Smith (1994), Barnett (1992).	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases carry their responsibilities and commitment towards realising continuous quality improvement (CQI). Commitment to quality improvement in both embedded cases ensures that people will never stop learning. Commitment to quality from leadership in both embedded cases is essential to achieve CQI and create quality culture. Both embedded cases are committed in providing and facilitating necessary knowledge required for its students and staff at all levels.

Table A.11.8 Measurement Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
MEASUREMENT	<p>Martin (1993), Freeman (1993), Dale and Bunney (1999), Deming (2002), Juran (1989), Crosby (1979), Michael <i>et al</i> (1997), Richardson (1994),), EFQM (2003), Hides <i>et al</i> (2004), MBNQA (2004), Seymour (1992), Schalkwyk (1998), Kanji (2001), Oakland, (2002), Oakland (1993), Besterfield <i>et al</i>, (2003), Goetsch and Davis (2003), Dale1(999), Mehra <i>et al</i>, (2001), Freed and Klugman (1997), James (1996), BS 7850 (1992), BS EN ISO 9000: 2000, Thiagarajan and Zairi (1997), Geddes (1993), Owlia and Aspinwall (1996), Sallis (2002), Harman and Meek (2000), Jackson (2001), Robert (1997), Campbell (2000), Race (2004), Sims (1995), Spanbauer (1995), Kachurick (1994), Lam and Zhao (1998).</p>	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases are evaluated their provided programmes and services taking into account the findings of evaluation process towards improving the quality of their provided processes. Both embedded cases believe to create a culture of self-evaluation (self-assessment) through training and education, improving employees' skills, and building confidence and respect among the members of organisation. Also, use self-assessment to evaluate processes and enable leaders to find and monitor determined quality problems and seek continuous improvement. Both embedded cases use quality tools and techniques to support and enhance continuous quality improvement processes and built decisions on facts. Both embedded cases compare (to learn from peers i.e. benchmarking) their services, activities, processes, products and results with other similar excellent institutions that realise considerable achievements in such aspects.

Table A.11.9 Continuous Improvement Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
CONTINUOUS IMPROVEMENT	<p>Bergman and Klefsjo (1994), Martin (1993), Freeman (1993), Ho and Fung (1994), Deming (2002), Crosby (1979), Feigenbaum (1991), Johnson and Golomski (1999), MBNQA (2004), Zhang (1997), Baidoun and Zairi (2003), BS EN ISO 9000:2000, Walton (1985), Goetsch and Davis (2003), Jabnoun (2001), Oakland (2000), Juran (1989), Kanji (2001), Seymour (1992), Freed and Klugman (1997), Spanbauer (1995), Lomas (2004), Temponi (2005),</p>	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases are believed and encourage the importance of continuous quality improvement processes Continuous improvement processes offered by both embedded cases at all academic levels are with regard to contents, teaching methods, learning processes, research processes, lecturers' skills and modernisation of academic programmes. Continuous improvement processes offered by both embedded cases are steadily tied to continuous assessment, expectations and satisfaction of their stakeholders' needs e.g. students, government, employers and society as a whole.

Table A.11.10 Empowerment and Involvement Theme

TQM principle (Theme)	Key Related Literature Review	Interview Questions (or issues)
EMPOWERMENT AND INVOLVEMENT	Salama (2001), Dale and Bunney (1999), Ho and Fung (1994), Deming (2002), Michael <i>et al</i> (1997), Johnson and Golomski (1999), Sallis (2002), EFQM (2003), MBNQA (2004), Srikanthan and Dalrymple (2004), Besterfield <i>et al</i> (2003), Morris and Haigh (1996), Goetsch and Davis (2003), Martin (1993) Curry and Kadasah (2002), Freed and Klugman (1997), Sun <i>et al</i> (2000), Kondo (1997), Ang (2002), Cornesky and McCool (1992), Fullan (2001), Saunders and Walker (1991).	<p><i>This Theme Examines to What Extent:</i></p> <ul style="list-style-type: none"> Both embedded cases involve employers in their institutional programmes, for example; course design, measurement and evaluation. Senior leaders in both embedded cases can help and support people at all levels to overcome barriers that could hamper efficient empowerment. Both embedded cases believe that empowerment means giving their student and staff at all levels with knowledge, skills, and abilities to affect the system and the power to change the system. Staff members in both embedded cases participate in the process of decision-making.

APPENDIX 3

Table A.12 Development of LHE (source adopted: AL-Teer (2006:42))

Academic Year	Number of students	% of females students	Number of universities	Number of students/1000 of population
1955/1956	31	00	1	0.03
60/61	729	3.3	1	0.54
65/66	1891	9	1	1.21
70/71	5198	11	1	2.81
75/76	13417	18	2	6.03
80/81	19453	22	3	7.12
85/86	36600	28	11	11.00
90/91	62227	42	13	15.73
95/96	129173	44	14	28.44
98/99	165447	47	14	32.00
2001/2002	171394	50	27	33.00

Table A.13 Libyan Public Universities (synthesised from: GSUSM (2005))

University	Establishment year	Location of the main campus
Al-Fateh	1957	Tripoli
Garyounis	1955	Benghazi
Sabha	1983	Sabha
El-Tahadi	1991	Sirt
Omar El-Mukhtar	1989	Baida
Al-Mergib	1987	Khoms
Seventh of April	1988	Zawia
Seventh of October	-	Musrata
Darna	1995	Darna
Al-jabal Al-ghrbi	1986	Ghyrian
The Open University (special nature)	1988	Tripoli
Al-Asmaria (special nature)	1997	Zlitan
Naser (special nature)	1987	Tarhona

Table A.14 job seekers from Libyan HEIs graduates (source adopted Ali (2006: 211))

Qualification	Males	Females	Total	Percentage
Bachelor	5009	3895	8908	9.4
Licentiate	2542	3704	6246	6.6
High Diploma	3296	2777	6073	6.4
Total	10847	10376	21227	22.4

APPENDIX 4

A Sample of Interview Transcript

The following is a transcript interview with faculty staff member (first embedded case study). This transcript is a translation from Arabic to English Language and sometimes because of that literal translation the grammar appears clumsy.

Interview Number 26

Interviewer: The researcher

Interviewee Position (Respondent): Faculty Staff Member (Lecturer)

Date: 13/11/2006

Length of interview: 1:20 hour

The interviewer introduces himself to the respondent and explains the nature of the research and reassures him that all information and data obtained from him will be treated confidentially.

Interviewer: [does not get time to speak before he gets interrupted from the respondent.]

Respondent: *Sorry before you start your questions I want to say some thing about what I heard from you regarding your research; generally in Libya, there is a lack of such research which focuses on quality in higher education; really we miss that in our HEIs.*

Interviewer: *That is good starting point. Why do you think that there is a lack of such research in Libya regarding improving the quality of services provided by LHEIs?*

Respondent: *In my opinion, very recently people started talk about quality, in fact we have no qualified people in this area and such lack of research not only at the level of higher education sector but at the levels of other sectors,.*

Interviewer: *Can you give me an example?*

Respondent: *Industrial sector; some times I work as a consultant for some companies; I found that there is no or little concern about the quality research. As I said, this topic is new and it needs time and professional people in quality area.*

Interviewer: *You know that learning from problems helps a lot to improve or/and prevent them happen again, this means improve the quality of processes. To what extent you think department leaders learn from those problems?*

Respondent: *Yes, the department head can learn from problems and tried to prevent them in future while he is a head of the department that is interval of two years. But if new department head come, those problems could happen again and the new head starts tackle them over again.*

Interviewer: *Why in your opinion?*

Respondent: *In my opinion, because the absence of 'assistant (support) team' e.g. secretary and qualified employees which usually existed in universities, however one of the responsibilities of such assistant team is to keep documenting all problems and issues faced the department and their solutions which helps the new head to benefit from previous problems. Also, the rapid change of department head even in many occasions before two years due to social or political issues makes things difficult for him to solve the problems particularly problems or issues that needs quick solutions. As a result, many administrative processes encountered difficulties which eventually affect other educational processes. In my perspective, there are four reasons behind preventing leaders learn from previous problems; first, the lack of effective communication among related people. Second, the rapid changes encountered related and responsible people. Third, changeability encountered regulation at levels of universities, faculties, and departments. Finally, lack of co-ordination among different responsible bodies and lack of appropriate access to related documents e.g. house keeping.*

Interviewer: *To what extent you think that the department top management is able to carry its responsibility towards removing barriers and obstacles that make difficult for students and staff members to do their job more efficient and effective?*

Respondent: *Well it depends on the experience and charisma of the department head, if the department head possesses long experience in academic and administrative fields, this experience will reflect his skills towards removing, treating difficulties and barriers facing faculty staff members, support staff, and students in the department. On the other hand, some people who occupied this position [department head] lack such experience and skills, the department faced a lot of academic and administrative difficulties at that time.*

Interviewer: *Are there any training leadership courses or programmes offered by university to those people who suppose to be heads of faculties or departments?*

Respondent: *Unfortunately, no, those courses or programmes neither offered by university nor by public committee of higher education. Therefore, people who have experience and are able to lead the department as I said, they built their own experience through long time of work in academic and administrative fields, in addition to the opportunities of dealing with many other organisations e.g. as consultants and advisors.*

Interviewer: *How department heads come to this position?*

Respondent: *In fact there is no specific criterion for this issue; it depends on who got his scientific degree first. The oldest who got his degree the first occupy the department head position. However, the university regulations states that the department head should be chosen by all staff members, I believe it is a democratic way, but at the same time it is right for the chosen person to accept the position or not. Most of chosen people do not accept the position because of responsibilities and they know that they will face problems without any sort of recognition or privileges; also they need to improve their financial outcomes by working as a part time lecturers or consultants, hence they have no time for that if they involved in such position.*

Interviewer: *In your opinion, how such issue could be improved?*

Respondent: *It is possible to make people accept the position of department head if he offered appropriate financial recognition and given more jurisdictions, because department head can take decisions but to execute and apply them is another story, it could be difficult while those decisions need to be approved from the faculty or/and university top management which takes long process, that is simply bureaucracy.*

Interviewer: *To what extent do you see leadership style in the department emphasises the notion of train and coach rather than superior?*

Respondent: *I think the nature of department head in this department is organiser more than a superior leader who gives orders, because of the atmosphere imposed by academic environment where people have almost same academic levels. In such environment, the department head works as example and consider himself one of the team through mutual respect with all staff members. In addition, the most important decisions are taken by department board which comprises all academic staff members, this makes things more democratic.*

Interviewer: *You know that senior leaders in any organisation play important role in creating vision, goals, values, and systems that guide the pursuit of continuous improvement processes. How you see this issue in your department?*

Respondent: *In my opinion department head is the person who is responsible to create committees and teamwork groups to improve the processes and achieve the goals, the department has goals to be realised in different aspects e.g. improve the provided curricula, courses, and postgraduate studies in order to satisfy the needs of society. I believe that all this requires a leader who should have comprehensive vision to the total issues and appropriate plan to improve educational processes. This could be identified through department head's plans, decisions and improvement suggestions introduced to the department board. I think these issues depend on skills, ability, and ambition of the department head towards improving different processes.*

Interviewer: *This is in general but what about the current situation?*

Respondent: *Yes, there is improvement but not to much to be honest e.g. in the curricula and facilities needed for postgraduate, also I think our graduates have good reputation and accepted from many organisations, which indicates that there is improvement in our processes.*

Interviewer: *Do you think that these indicators are sufficient to say that the department provides good quality processes?*

Respondent: *No, according to my best knowledge there is no criteria or specific measurement approach used to assess those issues or processes provided or related to universities, what I mean is may be because of our university (AFU) is the biggest and one of the oldest universities in Libya, also may be because there is no or little competition from other universities or may be because of culture aspect that people believe and proud if they graduated from specific university rather than other is privilege. All of these concepts could comprise and create the level of graduates' acceptance from other organisations.*

Interviewer: *Is there any feedback from employers regarding the level of your graduates?*

Respondent: *As far as I know, there is no such feedback, I believe it is important because you can see yourself from other eye; it means other one can see things and suggest ideas that you do not see and you do not know. However, the other side should have the necessary knowledge and understand higher education issues in order to be able to provide vital ideas.*

Interviewer: *According to what you said, employers should be involved in your provided processes, but they should have the knowledge that enable to understand how to deal with that.*

Respondent: *Yes*

Interviewer: *How could be realised effectively in you opinion?*

Respondent: *I think many of those people are graduated from HEIs, basically they have some knowledge about HEIs, I think at the beginning we and them should create committees or teams to meet and seat together and discuss related issues, through such meetings we and them can interchange information and knowledge which gives us opportunity to understand both academic environment and real work environment.*

Interviewer: *You know that honesty and fairness are important characteristics in leaders' behaviour; how you see this issue in you department?*

Respondent: *According to my experience which is more that twenty years now, confidently I can say that all of any staff members who have been involved as a faculty or department head are behaving ethically and treat all people (i.e. faculty members, support staff members, and students) fairly and equally.*

Interviewer: *Leaders usually criticised for not listening to the others (e.g. staff members, students) and communicate with them related issues; how you evaluate this aspect in the department?*

Respondent: *In most of the departments including this department, academic staff members are all members in department board; accordingly there is opportunity for all of them to discuss related issues or themes, even in some occasions specific issues are not discussed with all members, but it is commonly the department head discusses those issues with old generation members who have more experience than others.*

Interviewer: *You know that teaching and learning processes involves both teachers and students. Listening to students' views in this case is important to improve such processes; how you see this issue in your department?*

Respondent: *I remember that two years ago the department decided to distribute questionnaire survey on students to collect some data regarding some issues related to different aspects of educational programmes provided by the department. However, according to my knowledge the results of such survey were understood as criticism form some staff members from one side, and not enough from other side because relatively small number of students return their feedbacks. Accordingly, this way is failed to obtain students' views; by the way it was the first and last time for such survey in the department.*

Interviewer: *Why you think that this way is not effective to obtain students' feedbacks?*

Respondent: *I think, the survey method itself is good but the way of dealing with the results is inappropriate.*

Interviewer: *How could it be more effective in your opinion?*

Respondent: *I think the related people (i.e. staff members and students) should understand the reason(s) behind such survey by provide them with the necessary knowledge about the purpose and importance of such survey, this could be achieved through e.g. lectures, newsletters, or any communication way*

Interviewer: *Educational programmes need to be supported by required facilities e.g. libraries, laboratories, books, and journals; to what extent those facilities are available in the department to fulfil staff members' and students' satisfactions.*

Respondent: *In fact, there is a big shortage in all facilities you named; the existed facilities do not fulfil the needs of academic members, researchers, and students. Because administrative bureaucracy is the dominant characteristic encountered our administrative system which I considered as barrier facing most of processes improvement. If you request e.g. a book or laboratory's equipments, such request takes long time through long process of procedures which affects the success of any educational processes.*

Interviewer: *In the department, to what extent people are encouraged to work within teams while this notion is helpful and support improving different processes provided by the department?*

Respondent: *Working within teams is not effectively applied in the department. In addition, working within teams did not introduce or put forward as an idea to improve processes. Personally I believe that if this notion is used in the department many processes e.g. scientific research, and teaching and learning processes could be improved, because team members will learn from each other and exchanging ideas and knowledge.*

Interviewer: *That means department board not practicing effective teamwork.*

Respondent: *Up to certain level, yes the board is practicing some aspects of teamwork, what I mean is to use teamwork notion e.g. in research groups.*

Interviewer: *Do you encourage your students to work within teams?*

Respondent: *As I said earlier the notion of working within teams is not applied either at the levels of staff members or students, only at individual bases, students could discuss subject or problem as friends or colleagues but not under official teams. In addition, there is no policy or mechanism adopted by the department regarding working students in teams. However, this could be happened occasionally in final projects may be two to three students are working together to accomplish the project. Basically, each student should have his own project, however, according to my experience I found it unfair to give all members of the group who provide e.g. experimental report same mark, I know that only one or two students did all the work. From this point, it is difficult to assess them fairly. In my opinion at the final project stage number of students should not be more than two student, one student is responsible for theoretical part and the other one is responsible for practical part and both of them will be assessed in the two parts.*

Interviewer: *Effective communication is crucial process in facilitating better common understanding among the people at different levels of any organisation; how you assess the effectiveness of communication process in the department?*

Respondent: *Generally I can say that the communication process either within the department or between the department and faculty is ineffective and considerably weak.*

Interviewer: *Why? Could you please explain more?*

Respondent: *First of all the communication means used within the department are traditional e.g. pigeon halls, letters, phones, notes board and of course face-to-face meetings. The most effective one is meetings where people can express their opinions and ideas, but this mean only available at the level of the department board, and some times because of absenteeism encountered many staff members, this mean becomes ineffective from this point of view. Communication with students only through the lectures or notes board, in both means most of the problems can not be discussed effectively. In fact the lack of*

internet within the university makes communication process among different levels difficult, which eventually influence other processes e.g. educational and administrative processes.

Interviewer: *In your opinion, how communication process could be improved?*

Respondent: *Technology can help a lot in this issue, the availability e.g. of internet and information system is vital towards improving communication process. Also, creation of teams makes people close together and communicates effectively.*

Interviewer: *Education and Training programmes offered by organisations to their staff members are important to widen their knowledge and improve their skills towards improving their jobs; how you see this issue in your department?*

Respondent: *I believe that all staff members should attend some courses related to their jobs from time to time in order to develop their skills, unfortunately such education and training programmes or courses do not offered or provided by university to its staff members. Also, there is no any sort of proposals of training courses or programmes even at individual levels are mentioned in the department board. Additionally, improving the skills of faculty members is base on his personal efforts; myself I tried to improve my skills through e.g. supervising student's final project, where I can learn about new techniques such as fuzzy logic or/and neural networks which needed in this project.*

Interviewer: *Do you think that you are in need to specific training courses?*

Respondent: *Definitely yes*

Interviewer: *In which field?*

Respondent: *Some new computer programmes related to my area and new teaching methods using new techniques and technology for this purpose.*

Interviewer: *You know that recognise and reward excellent works and exceptional efforts encourage and motivate people towards do it again and make them continuously seeking excellence; to what extent reward and recognition system adopted by the department consider such aspects?*

Respondent: *Theoretically there is a recognition and reward system, I mean the regulations and articles as a document is existed. But the problem encountered this system is how could be more effective and efficient, because the discipline regulations are not effectively executed, people who show good work are treated equally with people who do not offer minimum requirements of their jobs, and there is no specific criteria for assessing good quality work e.g. good research or good teaching.*

Interviewer: *Why such system is not applied or executed effectively?*

Respondent: *In fact I have no clear idea about that, I think there is lack of understanding among the university leaders regarding the importance of the role that can be played by such system in motivating and encouraging people towards realise good quality work.*

Interviewer: *Money is considered one of important factors behind people's motivation; to what extent you think that the recognition system consider this issue?*

Respondent: *Most of faculty members in Libyan HEIs are working as part time lecturers or conslatnts to increase their incomes, this indicactes that salieries provided under the regulations of this system are not satisfies the needs of those members. On the other hand, this impacts negatively on the role of faculty members as a researchers, because they have no time for research work.*

Interviewer: *To what extent you think that the department committed towards achieving and providing good quality services?*

Respondent: *In this department there are many attempts to improve the curriculum provided at levels of postgraduate and undergraduate studies. Also, attempts to improve the laboratories especially in increases of students' number. But these all attempts faced a lot of problems and obstacles. For example, there is no strategic plan for such attempts and also there is a lack of sufficient budget. Accordingly, the commitment to provide good quality services in my opinion is a function [smile as he uses mathematical term] of good facilities.*

Interviewer: *In your opinion, how the department or/and university can be more commitment to improve the provided services?*

Respondent: *I am sure that there is a general believe among all staff members in the department that improving the quality services particularly that related to students is crucial, because improving the quality of services impacts positively the quality of our outcomes. However, in order to make people at all levels committed to quality, there should be appropriate infrastructure including many important facilities e.g. good libraries, laboratories, internet access, and effective information system. Above all of these, there should be a strategic and comprehensive plan which takes in consideration e.g. training programmes offered to all levels of staff members, for instance in quality issues, programmes that enhance and improve the job skills of staff members, and establishing networks where people interact each other and exchange information and knowledge.*

Interviewer: *You know that assessing or evaluating programmes and services provided by any organisation is an important step towards achieving high level of quality; to what extent you think your department or/and university (if you know) evaluate their provided programmes and service?*

Respondent: *In fact, this is very important issue; however none of them assess their programmes and services so far. Myself I have no clue or idea about how this could be done, because we never discuss this issue in the department board or when I meet with other people from different departments, faculties, and universities in Libya. On the other hand, only some aspects of curricula is changed by adding or removing some topics, but this usually occur in postgraduate curricula, however, in undergraduate studies only few changes occur because you know in this level almost basic knowledge is provided.*

Interviewer: *Yourself, how you review or assess your e.g. course(s) you provide in order to develop or improve it?*

Respondent: *As I said for undergraduate level does not need much changes, however, from time to time I add some new examples or/and problems so students can understand ideas better. In postgraduate level most likely I assess and improve materials through internet "out of the department" by logging different websites of international universities, however this is not the best way for that, but it becomes the best in the lack of related new text books, journals, and periods.*

Interviewer: *What you mentioned now about how you assess and improve postgraduate course(s) you provide is generally called benchmarking technique, where organisations learn from each other through comparing their provided services and outcome with excellent peers. Do you have any idea if your department tried to compare its programmes and services with any national or international peer department and how?*

Respondent: *Regarding this point, I know that the department head discussed some issues regarding improving our provided programmes with one or two German universities, but up to now there is no practical action towards this objective, I think there is no specific approach to accomplish this sort of co-operation, however may be in future we could do that.*

Interviewer: *You know that university's outcomes (outputs) e.g. graduates are inputs of other organisations e.g. the main employers of those graduates, this means the quality level of your outcomes impacts either positively or negatively the quality services provided by those organisations. Accordingly, from logical point of view those organisations should be involved by way or another in your provided programmes and services. To what extent those employers are involved in you programmes?*

Respondent: *I believe in this issue, there should be effective co-operation and co-ordination between the department and employers of its graduates, also this co-operation should be extended to faculty and university as a whole. According to my knowledge in developed countries, companies and institutions as employers they have got their own training centres where graduates can accomplish their required practical knowledge needed by labour market. However, in Libya only few employers have such training centres, but still can not fulfil all skills requirements needed by labour market. Accordingly, we increase the number of units required by student to be graduated to 152 unit in order to bridge the gap at least partially between the required skills of graduates and labour market needs, while in UK for example the units required in the same area for students to accomplish their degree is 120 unit only. Because employers in UK have got appropriate facilities to provide effective training to such graduates.*

Interviewer: *In your opinion, how could the relationship between Libyan HEIs and employers improved?*

Respondent: *As I said earlier, I think the first step is to establish effective open communication process in order to understand each other, this could be realised through mutual exchange of knowledge and information by organising meetings, conferences, and symposiums. By this way employers can be closed to academic environment and vice versa, therefore the relationship gradually improved.*

Interviewer: *Would you like to add any information you think that it is important.*

Respondent: *I would like to say that the quality issues are very important and we should think and work seriously in Libya towards improving the quality of different aspect of service provided by Libyan HEIs, in my perspective your research would expect to provide vital results to Libyan HEIs and would comprise a very good background for other future research in the same area while this is the first research at the level of PhD about quality in Libyan universities according to my knowledge. Thank you so much for this opportunity, I wish you success in your research as well as in your life as a researcher in this important field.*

Interviewer: *Thank you very much for your patient and your time; I highly appreciate your co-operation.*

End of interview 26

APPENDIX 5

Implications for Higher Education Institutions

It is intended that this research can be used as a suggestion for university leadership in institutions that are looking to improve quality. It could become a blueprint for their efforts to reach quality improvement objectives. Several suggestions that are derived from this research include:

- University top-management can use the issues that are enabling and affecting the quality of services identified in this research to get better understanding of the full picture of operating variables in practice.
- As many universities particularly in Libya and similar developing countries including Arabic countries strive to improve their quality services, this research has offered vital responsiveness in the form of the critical knowledge that can be used to improve different quality aspects of provided services.
- Based on the investigated issues that are affecting the quality of services within the two embedded cases, university leadership can develop a plan to assess and measure the current issues that might affect the quality of services in order to assign responsibilities and resources within the institution. Also, leadership can monitor the progress for achieving university wide improvements towards excellence.
- From this study, leadership can derive a better understanding of the activities and services that are undertaken by universities. Also, leadership can build an overview idea about how these activities and services are being dealt with in the two embedded case studies and consequently derive ideas for investigating their own situation.
- The conceptual view and associated body of knowledge about quality issues within HEIs, provided by this research, can offer considerable background for further complementary research that aim to enhance understanding of quality issues in HE and their interrelationship.
- The issues enabling and affecting quality of services provided by both embedded case studies concluded in this research could be used as a foundation for further similar research in the HE context.